This printed version of the Schedule of Classes is current as of 1/13/21 9:17 AM.

AASP African American Studies Fall 2020

AASP100 **Introduction to African American Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

Significant aspects of the history of African Americans with particular emphasis on the evolution and development of black communities from slavery to the present. Interdisciplinary introduction to social, political, legal and economic roots of contemporary problems faced by blacks in the United States with applications to the lives of other racial and ethnic minorities in the Americas and in other societies.

0101	Shane Walsh MWF 10:00am - 10:50am	Seats (Total: 35) ONLINE
0201	Shane Walsh MWF 12:00pm - 12:50pm	Seats (Total: 35) ONLINE
0301	Kameron Patterson TuTh 9:30am - 10:45am	Seats (Total: 35) ONLINE
0401	George Kintiba TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE
0501	Jason Nichols TuTh 11:00am - 12:15pm	Seats (Total: 35) ONLINE
0601	Jason Nichols TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE
0701	Shane Walsh MWF 2:00pm - 2:50pm	Seats (Total: 35) ONLINE

AASP100H **Introduction to African American Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

Significant aspects of the history of African Americans with particular emphasis on the evolution and development of black communities from slavery to the present. Interdisciplinary introduction to social, political, legal and economic roots of contemporary problems faced by blacks in the United States with applications to the lives of other racial and ethnic minorities in the Americas and in other societies.

0101	George Kintiba TuTh 12:30pm - 1:45pm	Seats (Total: 5) ONLINE

AASP101 **Public Policy and the Black Community**

Credits: 3 | Grading Method: Regular, Pass-Fail | CORE: SB | General Education: DSHS

Formerly: AASP300.

The impact of public policies on the black community and the role of the policy process in affecting the social, economic and political well-being of minorities. Particular attention given to the post-1960 to present era.

0101	Cecily Hardaway TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE

AASP200 **African Civilization**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

A survey of African civilizations from 4500 B.C. to present. Analysis of traditional social systems. Discussion of the impact of European colonization on these civilizations. Analysis of the influence of traditional African social systems on modern African institutions as well as discussion of contemporary processes of Africanization.

0101	George Kintiba MW 12:00pm - 1:15pm	Seats (Total: 40) ONLINE
FC01	George Kintiba TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE

AASP202 **Black Culture in the United States**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

The course examines important aspects of African American life and thought which are reflected in African American literature, drama, music and art. Beginning with the cultural heritage of slavery, the course surveys the changing modes of black creative expression from the 19th-century to the present.

0101	Renina Jarmon MWF 11:00am - 11:50am	Seats (Total: 35) ONLINE
0102	Renina Jarmon MWF 1:00pm - 1:50pm	Seats (Total: 35) ONLINE
0103	Robert Choflet TuTh 11:00am - 12:15pm	Seats (Total: 35) ONLINE
0104	Robert Choflet TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

AASP202H **Black Culture in the United States**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

The course examines important aspects of African American life and thought which are reflected in African American literature, drama, music and art. Beginning with the cultural heritage of slavery, the course surveys the changing modes of black creative expression from the 19th-century to the present.

0103	Robert Choflet TuTh 11:00am - 12:15pm	Seats (Total: 8) ONLINE

AASP210 **Intro to Research Design and Analysis in African American Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Introduces students to quantitative and qualitative research methods used in social science with a focus on Black populations and African American Studies Research. Uses practical exercises, such as class surveys and mock focus groups, to examine fundamental concepts of the research process from conceptualization of research questions to interpretation of data and research articles. The course is designed for undergraduate students with little or no background knowledge in social science research methods.

0101	Angel Dunbar MW 10:00am - 11:15am	Seats (Total: 20) ONLINE

AASP298C **African-American History to 1865**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DVUP

Cross-listed with: HIST254. Credit only granted for: HIST254 or AASP298C.

Survey of the principal developments in the history and culture of the peoples of African descent in colonial North America and the United States to 1865. Examines the African past, the Atlantic slave trade, variation in slavery, the growth of free black communities, the transformations of families and cultural forms, and patterns of resistance.

0101	Christopher Bonner TuTh 11:00am - 12:15pm	Seats (Total: 40) ONLINE	

AASP298I **Special Topics in African American Studies; Introduction to Black Women's Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introductory multi-disciplinary and inter-disciplinary educational experience to explore issues relevant to black life, cultural experiences, and political, economic, and artistic development.

Cross-listed with AASP298I. Credit only granted for WMST298A or AASP298I .

0101	Elsa Barkley Brown MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Elsa Barkley Brown MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

AASP298L **African-American Literature and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with: ENGL234. Credit only granted for: ENGL234 or AASP298L.

An exploration of the stories black authors tell about themselves, their communities, and the nation as informed by time and place, gender, sexuality, and class. African American perspective themes such as art, childhood, sexuality, marriage, alienation and mortality, as well as representations of slavery, Reconstruction, racial violence and the Nadir, legalized racism and segregation, black patriotism and black ex-patriots, the optimism of integration, and the prospects of a post-racial America.

Cross-listed with ENGL234. Credit granted for AASP298L or ENGL234.

0201	Elizabeth Catchmark MWF 12:00pm - 12:50pm	Seats (Total: 30) ONLINE

AASP298P **Special Topics in African American Studies; Poverty, Race and African-American Children**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introductory multi-disciplinary and inter-disciplinary educational experience to explore issues relevant to black life, cultural experiences, and political, economic, and artistic development.

0101	Cecily Hardaway	Seats (Total: 20)
	MW 11:00am - 12:15pm	ONLINE

AASP301 **Applied Policy Analysis and the Black Community**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AASP101; and (ECON201 or ECON200). Recommended: Completion of one semester of statistics is recommended.

Development and application of the tools needed for examining the effectiveness of alternative policy options confronting minority communities. Review policy research methods used in forming and evaluating policies. Examination of the policy process.

0101	Ricco Hall	Seats (Total: 24)
	W 6:30pm - 9:00pm	ONLINE

AASP310 **African Slave Trade**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AASP202 or AASP100; or permission of BSOS-African American Studies department. Formerly: AASP311.

The relationship of the slave trade of Africans to the development of British capitalism and its industrial revolution; and to the economic and social development of the Americas.

0101	George Kintiba	Seats (Total: 35)
	W 2:00pm - 4:30pm	ONLINE

AASP313 **Black Women in United States History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Sophomore standing or higher. Cross-listed with: WGSS314. Credit only granted for: AASP313, WMST314 or WGSS314. Formerly: WMST314.

Black American women's history from slavery to the present. Focused on gaining a fuller understanding of the effect of race, class and gender on the life cycles and multiple roles of Black women as mothers, daughters, wives, workers and social-change agents.

For Fall 2020: Also offered as HIST329E. Credit granted for AASP313, HIST329E, or WMST314.

0101	Elsa Barkley Brown	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	ONLINE

AASP386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of BSOS-African American Studies department; and junior standing or higher.

0101	Marshal Washington	Seats (Total: 10)
	F 2:00pm - 4:30pm	ONLINE

AASP397 **Senior Thesis**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of BSOS-African American Studies department.

Directed research in African American Studies resulting in the completion and defense of a senior thesis.

Contact department for information to register for this course.

AASP398C **Selected Topics in the African Diaspora; African American Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

Also offered as AMST328U and ENGL317. Credit only granted for AMST328U ENGL317, or AASP398C.

0101	Julius Fleming	Seats (Total: 27)
	MW 2:00pm - 3:15pm	ONLINE

AASP398G **Selected Topics in the African Diaspora; Gender, Labor and Racial Identities in Diaspora Communities**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

Cross-listed with AMST328K. Credit only granted for AASP398G or AMST328K.

0101	Sharon Harley	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	ONLINE

AASP398Q **Selected Topics in the African Diaspora; Black Baltimore in the Post Racial U.S: African American Urban Culture in the Age of Obama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

0101	Robert Choflet	Seats (Total: 35)
	Th 4:00pm - 6:30pm	ONLINE

AASP398U **Selected Topics in the African Diaspora; Angela Davis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

0101	John Drabinski	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	ONLINE

AASP399 **Research in African-American Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular

African American Studies research labs are the settings in which the most recent scholarly work of each faculty member takes place with the enterprise of conducting and disseminating research. Faculty members operate as the team leader and faculty mentor working with undergraduate students around a specific research topic or project. Students will have the opportunity to assist with reviewing literature, data gathering, data management, coding analysis, and the preparation of conference presentations and scholarly publications while advancing their own scholarship and interests, cultivating integrative skills, and gain training in a specialized aspect of the African American Studies discipline, which may not be otherwise available from other experiences on campus.

Contact department for information to register for this course.

AASP401 **Research Directions in African-American Studies**

Credits: 3 Grading Method: Regular

Restriction: Must have earned a minimum of 90 credits; and must be major in African-American Studies.

Utilizing a pro seminar format, this course offers an overview of recent research on the experiences of African Americans and the African diaspora. The course will cover selective topics from research portfolios of department faculty related to the status of African Americans and the diaspora across a number of topics. Students will read recent original research studies and discuss with the authors both the theoretical underpinnings of the research, the methods and evaluate the interpretations. This course fulfills the capstone requirement for African American studies majors and certificate students by providing an opportunity to consolidate and integrate a range of ideas encountered in the curriculum.

0101	Oscar Barbarin	Seats (Total: 15)
	Th 3:30pm - 6:00pm	ONLINE

AASP478B **Humanities Topics in African American Studies; African-American Literature: The Beginning to 1910**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced studies in the humanities, often requiring prerequisites, focusing on the literary, artistic and philosophical contributions of Africans and African Americans.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Cross-listed with ENGL470. Credit granted for ENGL470 or AASP478B.

0201	Chad Infante	Seats (Total: 22)
	TuTh 2:00pm - 3:15pm	ONLINE

AASP498J **Special Topics in Black Culture; Racial Socialization of Children and Adolescents: Theory, Research and Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

0101	Angel Dunbar	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ONLINE

AASP498O **Special Topics in Black Culture; African American and Latino Social, Cultural and Political Relations: 1940 to Present**

Credits: 3 Grading Method: Regular

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

Cross-listed with USLT498E. Credit granted for AASP498O or USLT498E.

0101	Jason Nichols	Seats (Total: 35)
	W 4:00pm - 6:30pm	ONLINE

AASP499P **Advanced Topics in Public Policy and the Black Community; African-American Politics from Frederick Douglass to Barack Obama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examination of specific areas of policy development and evaluation in black and other communities. Application of advanced tools of policy analysis, especially quantitative, statistical and micro-economic analysis.

Jointly offered with GVPT368L. Credit only granted for AASP499P, GVPT368L, or PLCY388B.

0101	Kameron Patterson	Seats (Total: 30)
	Tu 3:30pm - 6:00pm	ONLINE

AAST Asian American Studies Fall 2020

AAST200 **Introduction to Asian American Studies**

Credits: 3 Grading Method: Regular, Pass-Fail CORE: SB, D General Education: DSHS, DVUP

Cross-listed with: AMST298C. Credit only granted for: AAST200 or AMST298C.

The aggregate experience of Asian Pacific Americans, from developments in the countries of origin to their contemporary issues. The histories of Asian Pacific American groups as well as culture, politics, the media, and stereotypes, viewed from an interdisciplinary perspective.

0101	Terry Park	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	ONLINE

AAST233 **Introduction to Asian American Literature**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Cross-listed with ENGL233. Credit only granted for: ENGL233 or AAST233.

A survey of Asian American literature with an emphasis on recurrent themes and historical context.

A survey of Asian American literature with an emphasis on recurrent themes and historical context.

0101	Andy Yeh	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

AAST298B **Special Topics in Asian American Studies; Visual Cultures of Islam**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

An introductory multidisciplinary and interdisciplinary educational experience to explore issues relevant to Asian American life, cultural experiences; and political, economic, and artistic development.

Crosslisted with ARTH389L, HIST219E, PERS298E, and RELS219E. Credit granted for HIST219E, ARTH389L, AAST298B, PERS298E, or RELS219E. Visual Cultures of Islam is part of the Digital Islamic Studies Curriculum (digitalislam.umich.edu). This course is taught by renowned University of Michigan instructor Christiane Gruber, an expert in the field of Islamic Art, and digitally shared with the University of Maryland. In this course, Professor Gruber explores definitions of "Islamic" art and investigates various visual cultures of Islam around the world from the 7th to the 20th century. The course meets twice a week in real time using video conferencing technology and students are able to enroll directly at Maryland for course credit.

0101	Instructor: TBA	Seats (Total: 12)
	TuTh 11:30am - 1:00pm	ONLINE

AAST378 **Experiential Learning**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Field experience/internship in professional organizations and appropriate private and governmental agencies serving the Asian American community.

0101	Julie Park	Seats (Total: 2)
	Contact instructor or department for details.	

AAST388 **Independent Research**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Directed, independent study in Asian American Studies resulting in the completion of an original research paper.

0101	Julie Park Contact instructor or department for details.	Seats (Total: 2)
0201	Terry Park Contact instructor or department for details.	Seats (Total: 2)

AAST394 **Growing Up Asian American: The Asian Immigrant Family and the Second Generation**

Credits: 3 Grading Method: Regular General Education: DVCC

Cross-listed with: AMST324, IMMR394. Credit only granted for: AAST394, AAST398E, AMST324, AMST328V, IMMR319G or IMMR394. Formerly: AAST398E.

An interdisciplinary course examines the experiences of children of Asian immigrants in the U.S., focusing on intergenerational dynamics in the Asian immigrant family, their intersections with race, gender, class, sexuality, and religion, and how these shape second-generation Asian American life. Topics include identity and personhood, the model minority myth and education, work and leisure, language and communication, filiality and disownment, mental health and suicide.

0101	Yeram Cheong TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE

AAST398D **Selected Topics in Asian American Studies; Filipino American History and Biography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP

Study of a specific theme or issue involving the Asian America experience.

Cross-listed with AMST328J. Credit granted for AAST398D or AMST328J. Focus is placed on Filipino American experiences with an emphasis on identity, community building and organizing to influence public policy We will cover pertinent events from the US and Philippine history in order to understand the impact of colonialism, migration, immigration and assimilation on Filipino Americans.

0101	Gemirald Daus Tu 5:00pm - 7:30pm Class time/details on ELMs	Seats (Total: 35) LEF 2205 ONLINE

AAST398F **Selected Topics in Asian American Studies; Introduction to Comparative Ethnic Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of a specific theme or issue involving the Asian America experience.

Cross-listed with AMST328L. Credit granted for AMST328L or AAST398F. Introduces students to the study of race and ethnicity in the United States. Through readings, film clips, and presentations, we explore how the concept of race has developed and endured over time through institutions and policies. This course will also help students to better understand how race is associated with other forms of difference, such as class, gender and ethnicity. We identify and confront prevailing myths about race and ethnicity in the United States. Finally, we examine the ways in which contemporary issues reveal the dynamics of race and ethnicity.

0101	Bayley Marquez	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

AAST398L **Asian Americans in Film**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | , D | General Education: DSHU, DVUP

Cross-listed with: AMST328W. Credit only granted for: AAST355, AAST398L or AMST328W. Formerly: 398L.

Explores how Asian Americans have historically been represented in the U.S. by Hollywood, and in turn, how independent and Hollywood Asian American filmmakers have represented themselves. It covers the history of racial, gendered, and sexualized representations of Asian Americans in Hollywood, as well as Asian American filmic responses within and outside Hollywood. It also introduces how four basic tools of film analysis mise-en-scene, cinematography, editing and sound work together to create meaning in moving images. It examines how these elements are put together in three different types of films by Asian American filmmakers: narrative, documentary, and experimental. How films function in society to circulate ideas that reproduce and challenge stereotypes about Asian Americans.

0101	Terry Park	Seats (Total: 30)
	W 5:00pm - 7:30pm	ONLINE

AAST398N **Selected Topics in Asian American Studies; Asian Americans and Media**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Study of a specific theme or issue involving the Asian America experience.

From yellow peril invaders to model minority allies, Asian Americans have crafted their own dynamic cultural expressions in a number of media from film, television, and music to fashion, sports, and food that reveal and contest the contradictions of the U.S. nation-state. Asian American culture also uniquely sits at the nexus of immigration flows and digital technologies, providing a transnational lens to view the US place in the world. This advanced course, then, will introduce students to the study and practice of Asian American culture as multiple, hybrid,and heterogeneous. It will do so through three sections: section one will introduce students to classic cultural and media concepts as well as relevant keywords outlined by Asian American Studies scholars; section two will review the work of Asian American cultural theorists; section three willfocus on analyses of particular Asian American cultural productions.In doing so, students will gain an understanding ofthe shifting and interlocking tensions among the local, the national, and the global thatform the cultural geographies of Asian America.

0101	Terry Park	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

AAST498J **Advanced Topics in Asian American Studies; Asian American Psychology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary Asian American society. Emphasis on the social, political, economic, and behavioral factors affecting Asian Americans and their communities.

Also offered as PSYC489Z. Credit only granted for AAST498J or PSYC489Z.

0101	Derek Iwamoto	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	ONLINE

AGNR Agriculture and Natural Resources Fall 2020

AGNR200 **AGNR 2+2 Program Extended Orientation Seminar**

Credits: 1 Grading Method: Regular

Prerequisite: Must be a first semester international student enrolled in the AGNR 2+2 Program. Restriction: Must be a first year international student enrolled in the College of Agriculture and Natural Resources 2+2 Program. Additional information: It is strongly recommended that AGNR 2+2 students take AGNR 200 during the first semester at the University. One class meeting per week. This courses is initiated by International Programs and will be coordinated in conjunction with the College of AGNR.

Introduces AGNR 2+2 students to University and "American" life. Assists with their successful transition to the College and Agriculture and Natural Resources and the University of Maryland. Helps students to understand their place in AGNR at to learn about the resources available to them.

0101	Chenglin Zhu M 4:00pm - 5:00pm	Seats (Total: 25) ONLINE

AGNR301 **Sustainability**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with PLCY301. Credit only granted for: AGNR301, PLCY301 or PUAF301.

Designed for students whose academic majors would be enhanced by the complementary study of a widely shared but hard-to-operationalize aspiration: that present choices should preserve or improve future options rather than foreclose or degrade them. How should we understand sustainability? How might we achieve it? How would we know if we had achieved it? And how could sustainability activists of a rising generation lead by example?

0101	Caroline Boules TuTh 12:30pm - 1:45pm	Seats (Total: 165) ONLINE

AGNR388 **Honors Thesis Research**

(Perm req)

Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

0101	Evelyn Cooper Contact instructor or department for details.	Seats (Total: 5)

AGNR499 **Special Problems; Special Problems**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

0102	Evelyn Cooper Contact instructor or department for details.	Seats (Total: 1)

AGST Agricultural Science and Technology — Fall 2020

AGST130 **Did Yeast Create Civilization?**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

Recommended: CHEM103, CHEM131, CHEM135, or CHEM146. Cross-listed with: PLSC130. Credit only granted for: AGST130 or PLSC130.

Fermented foods have played a major role in the transition from nomadic to settled agrarian societies, the establishment of social and religious customs, the expansion of empires, and modern economies. To what extent are our past and current attitudes towards fermented foods rooted in historical and cultural imprints? Explore the central role of fermentation in human history and culture, the basic microbiological processes underlying fermentation processes, and the processes used to produce and distribute fermented foods. Find out how the fruits, grains, and dairy products used to produce fermented foods are grown and selected. Students will learn about the development and modern use of fermented dairy products, pickles, bread, tea, chocolate, wine, beer, distilled liquors, and pharmaceutical/manufactured products.

There will be a required live/synchronous meeting on the first week of classes via Zoom on Monday 8/31/2020 at 6pm. If there is a time change to the meeting time, this will be communicated via ELMS.

0101	Wendy Peer, Angus Murphy	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

AGST333 **Crafty Beverage Crops**

Credits: 3 Grading Method: Regular

From soda to wine, a scientific introduction to "crafty beverage crops". Students will expand their horticulture knowledge and gain an appreciation for craft beverages and the plants that made them. Topics include history, biology, production and management techniques, harvest, storage and market potential for crafty beverage crops.

0101	Diana Cochran	Seats (Total: 28)
	TuTh 3:30pm - 4:45pm	ONLINE

AMSC Applied Mathematics & Scientific Computation Fall 2020

AMSC460 **Computational Methods**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH246. Also offered as: CMSC460. Credit only granted for: AMSC460, CMSC460, AMSC466, or CMSC466.

Basic computational methods for interpolation, least squares, approximation, numerical quadrature, numerical solution of polynomial and transcendental equations, systems of linear equations and initial value problems for ordinary differential equations. Emphasis on methods and their computational properties rather than their analytic aspects. Intended primarily for students in the physical and engineering sciences.

0101	Howard Elman MW 2:00pm - 3:15pm	Seats (Total: 35) ONLINE
0201	Stefan Doboszczak TuTh 11:00am - 12:15pm	Seats (Total: 35) ONLINE
0301	Vladimir Yushutin TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE
0401	Tobias von Petersdorff TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

AMSC466 **Introduction to Numerical Analysis I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH410. Also offered as: CMSC466. Credit only granted for: AMSC460, CMSC460, AMSC466, or CMSC466.

Floating point computations, direct methods for linear systems, interpolation, solution of nonlinear equations.

Click here for more course information.

0101	Dionisios Margetis TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE

AMSC498A **Selected Topics in Applied Mathematics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Topics in applied mathematics of special interest to advanced undergraduate students.

Contact department for information to register for this course.

AMSC660 **Scientific Computing I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have knowledge of C or Fortran. And AMSC460 or CMSC460; or (CMSC466 or AMSC466); or (must have knowledge of basic numerical analysis (linear equations, nonlinear integration, interpolation); and permission of instructor). Cross-listed with CMSC66 0. Credit only granted for: AMSC660 or CMSC660.

Monte Carlo simulation, numerical linear algebra, nonlinear systems and continuation method, optimization, ordinary differential equations. Fundamental techniques in scientific computation with an introduction to the theory and software of each topic.

0101	Tobias von Petersdorff	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

AMSC663 **Advanced Scientific Computing I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CMSC660 or AMSC660; and (CMSC661 or AMSC661). Restriction: Permission of instructor. Cross-listed with CMSC663. Credit only granted for: AMSC663 or CMSC663.

In the sequence Advanced Scientific Computing I & Advanced Scientific Computing II, (AMSC663/CMSC663 and AMSC664/CMSC664, respectively) students work on a year-long individual project to develop software for a scientific task in a high performance computing environment. Lectures will be given on available computational environments, code development, implementation of parallel algorithms.

0101	Maria Cameron	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

AMSC666 **Numerical Analysis I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CMSC466 or AMSC466; and MATH410. Cross-listed with: CMSC666. Credit only granted for: AMSC666 or CMSC666.

Approximation theory, numerical solution of initial-value problems, iterative methods for linear systems, optimization.

Click here for more course information.

0101	Eitan Tadmor	Seats (Total: 27)
	TuTh 2:00pm - 3:15pm	ONLINE

AMSC670 **Ordinary Differential Equations I**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

Prerequisite: MATH405. And MATH410; or students who have taken courses with comparable content may contact the department. Cross-listed with M ATH670. Credit only granted for: AMSC670 or MATH670.

Existence and uniqueness, linear systems usually with Floquet theory for periodic systems, linearization and stability, planar systems usually with Poincare-Bendixson theorem.

0101	Vadim Kaloshin	Seats (Total: 18)
	TuTh 12:30pm - 1:45pm	ONLINE

AMSC673 **Partial Differential Equations I**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MATH411; or students who have taken courses with comparable content may contact the department. Cross-listed with MATH67 3. Credit only granted for: AMSC673 or MATH673.

Analysis of boundary value problems for Laplace's equation, initial value problems for the heat and wave equations. Fundamental solutions, maximum principles, energy methods. First order nonlinear PDE, conservation laws. Characteristics, shock formation, weak solutions. Distributions, Fourier transform.

Offered fall only. Cross-listed with MATH673.

0101	Dionisios Margetis	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

AMSC689 **Research Interactions in Applied Mathematics and Scientific Computation**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

The students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) research group. Format varies, but includes regular meetings, readings and presentations of material. See graduate program's online syllabus or contact the graduate program director for more information.

Contact department for information to register for this course.

AMSC714 **Numerical Methods For Stationary PDEs**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: One graduate level course in partial differential equations or one graduate level course in numerical analysis or scientific computing; or permission of instructor. Credit only granted for: AMSC 714 or AMSC 614. Formerly: AMSC614. Additional information: This course is a complement to the graduate courses MATH 673 and MATH 674 in PDEs, AMSC 666 in numerical analysis, and AMSC 660 and AMSC 661 in scientific computing.

Topics include: Maximum principle, finite difference method, upwinding, error analysis; Variational formulation of elliptic problems, inf-sup theory; The finite element method and its implementation; Piecewise polynomial interpolation theory in Sobolev spaces; A priori and a posteriori error analyses, adaptivity; Fast solvers; Variational crimes; Mixed finite element methods.

0101	Ricardo Nochetto	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	ONLINE

AMSC760 **Applied Statistics Practicum**

(Perm req)

Credits: 3 Grading Method: Regular, Sat-Fail

Prerequisite: Must have completed one year of graduate study in Applied Statistics. Restriction: Must have project proposal approved by SAC coordinator.

A semester long applied applied statistical project (a minimum 10 hours per week or 120 hours in total), in an internship of collaborative research-laboratory setting working on a substantive applied quantitative project with significant statistical content.

0101	Howard Elman	Seats (Total: 10)
	Contact instructor or department for details.	

AMSC762 **Data Analysis Project**

(Perm req)

Credits: 1 Grading Method: Regular, Sat-Fail

Restriction: Permission of CMNS-Applied Mathematics department; and permission of instructor.

This course cannot be used to meet any of the Applied Statistics Area's seminar requirements. Offered yearly, required of and limited to MS non-thesis and doctoral students in Applied Statistics Area, for whom the resulting projects serve as a Qualifying Exam component. After 5-6 lectures or presentations on components of successful data analyses and write-ups, 3-4 sessions will discuss previous student project submissions. The culminating project, to be completed in a two week period between semesters, is an analysis and written report of one of three project choices made available each year to represent a spectrum of realistic applied statistical problems.

0101	Howard Elman	Seats (Total: 15)
	Contact instructor or department for details.	

AMSC799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

AMSC808A **Advanced Topics in Applied Mathematics**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

AMSC808N **Advanced Topics in Applied Mathematics; Numerical Methods for Data Science and Machine Learning**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

0101	Maria Cameron	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

AMSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Sat-Fail

Contact department for information to register for this course.

AMSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

AMST American Studies Fall 2020

AMST101 **Introduction American Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO, D General Education: DSHU, DVUP

Credit only granted for: AMST101 or AMST201. Formerly: AMST201.

Introduces students to the interdisciplinary field of American Studies by examining concepts such as culture, identity, cultural practices, and globalization, as well as theories underlying these concepts. Engages key themes, especially constructions of difference and identity, cultures of everyday life, and America and the world.

0101	Timothy Kumfer MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0102	Kelsey Michael MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0103	Jacqueline Partida MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0104	Shoji Sanders MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
FCB1	Dallas Donnell F 10:00am - 11:15am Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 21) ONLINE ONLINE	Discussion

AMST202 **Cultures of Everyday Life in America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

Examine the structures and patterns of everyday life in the U.S., utilizing methods such as ethnography, oral history, survey research, and textual, visual, and material cultural analysis.

0101	Nancy Mirabal MWF 10:00am - 10:50am	Seats (Total: 25) ONLINE

AMST203 **Popular Culture in America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU, DVUP

An introduction to American popular culture, its historical development, and its role as a reflection of and influence on our culture and society.

0101	Zachary Johnson MWF 11:00am - 11:50am	Seats (Total: 25) ONLINE

FCB1	Mark Lockwood F 1:00pm - 2:15pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE ONLINE	Discussion
FCB2	Mark Lockwood F 11:30am - 12:45pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE ONLINE	Discussion

AMST204 **Film and American Culture Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU, DVUP

Exploration of the American film from a historical perspective, illustrating the motion picture's role as an institutional phenomenon, as a form of communication, and as a source of cross-cultural study.

0101	Susan Pramschufer TuTh 9:30am - 10:45am	Seats (Total: 35) ONLINE

AMST205 **Material Aspects of American Life**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU, DVUP

Historical survey of American material culture. Ways of describing and interpreting accumulated material evidence (e.g., buildings, town plans) introduced by stressing relationship between artifact and culture.

FCB1	Wanda Hernández F 11:30am - 12:45pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE ONLINE	Discussion
FCB2	Wanda Hernández F 9:30am - 10:45am Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE ONLINE	Discussion

AMST262 **Houses, Schools, and Prisons in American Life**

Credits: 3 | Grading Method: Regular | General Education: DSHS, DVUP, SCIS

This interdisciplinary course explores the role of property, discipline, and punishment in American life. By exploring the ideological underpinnings in property, discipline, and punishment and their manifestations in houses, schools, and prisons we will explore how these entities reflect American society and its values.

0101	Perla Guerrero MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 15) ONLINE ONLINE	 Discussion
0102	Perla Guerrero MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 15) ONLINE ONLINE	 Discussion
0103	Perla Guerrero MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 15) ONLINE ONLINE	 Discussion
0104	Perla Guerrero MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 15) ONLINE ONLINE	 Discussion

AMST298C **Introduction to Asian American Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail | CORE: SB, D | General Education: DSHS, DVUP

Cross-listed with: AAST200. Credit only granted for: AAST200 or AMST298C.

The aggregate experience of Asian Pacific Americans, from developments in the countries of origin to their contemporary issues. The histories of Asian Pacific American groups as well as culture, politics, the media, and stereotypes, viewed from an interdisciplinary perspective.

0101	Terry Park TuTh 3:30pm - 4:45pm	Seats (Total: 40) ONLINE

AMST298Q **U.S. Latinx Literature and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO, D | General Education: DSHU, DVUP

Cross-listed with: ENGL235. Credit only granted for: ENGL235 or AMST298Q.

Examines the poetry, prose, and theater of Latinx communities in the United States from their origins in the Spanish colonization of North America to their ongoing development in the 21st century. Considers how authors use literary form to gain insight into human experience, including mortality, religious belief, gender and sexuality, war and peace, family, language use, scientific inquiry, cultural tradition, ecology, and labor. Also studies how Latinx literary traditions have shaped and been shaped by broader currents in American literature, as well as what connections exist between Latinx literature and social and artistic developments in other parts of the world, particularly Latin America and the Caribbean. Authors may include Alvar Nunez Cabeza de Vaca, Eulalia Perez, Juan Nepomuceno Seguin, Maria Amparo Ruiz de Burton, Jose Marti, Arthur A. Schomburg, Jesus Colon, Julia de Burgos, Cesar Chavez, Ariel Dorfman, Gloria Anzaldua, Junot Diaz, and Cristina Garcia.

Cross-listed with ENGL235. Credit granted for ENGL235 or AMST298Q.

0101	Kristofer Reed MW 5:00pm - 6:15pm	Seats (Total: 30) ONLINE

AMST324 **Growing Up Asian American: The Asian Immigrant Family and the Second Generation**

Credits: 3 Grading Method: Regular

Cross-listed with: AAST394, IMMR394. Credit only granted for: AAST394, AAST398E, AMST324, AMST328V, IMMR319G or IMMR394. Formerly: AAST398E.

An interdisciplinary course examines the experiences of children of Asian immigrants in the U.S., focusing on intergenerational dynamics in the Asian immigrant family, their intersections with race, gender, class, sexuality, and religion, and how these shape second-generation Asian American life. Topics include identity and personhood, the model minority myth and education, work and leisure, language and communication, filiality and disownment, mental health and suicide.

0101	Yeram Cheong TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE

AMST328J **Filipino American History and Biography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHS, DVUP

Also offered ad AAST398D. Credit granted for AAST398D or AMST328J. Focus is placed on Filipino American experiences with an emphasis on identity, community building and organizing to influence public policy We will cover pertinent events from the US and Philippine history in order to understand the impact of colonialism, migration, immigration and assimilation on Filipino Americans.

0101	Gemirald Daus Tu 5:00pm - 7:30pm Class time/details on ELMs	Seats (Total: 35) LEF 2205 ONLINE

AMST328K **Perspectives on Identity and Culture; Gender, Labor and Racial Identities in Diaspora Communities**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Cross-listed with AASP398G. Credit only granted for AASP398G or AMST328K.

0101	Sharon Harley	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	ONLINE

AMST328L **Perspectives on Identity and Culture; Introduction to Comparative Ethnic Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Cross-listed with AAST398F. Credit granted for AMST328L or AAST398F. Introduces students to the study of race and ethnicity in the United States. Through readings, film clips, and presentations, we explore how the concept of race has developed and endured over time through institutions and policies. This course will also help students to better understand how race is associated with other forms of difference, such as class, gender and ethnicity. We identify and confront prevailing myths about race and ethnicity in the United States. Finally, we examine the ways in which contemporary issues reveal the dynamics of race and ethnicity.

0101	Bayley Marquez	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

AMST328R **Religion in American Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: AMST 101.

Introduction to major religious traditions and the variety of religious beliefs and practices in the U.S.

0101	Asim Ali	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ONLINE

AMST328U **Perspectives on Identity and Culture; African American Literature**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Also offered as AASP398C and ENGL317. Credit only granted for AMST328U ENGL317, or AASP398C.

0101	Julius Fleming MW 2:00pm - 3:15pm	Seats (Total: 27) ONLINE

AMST328W **Asian Americans in Film**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Cross-listed with: AAST355. Credit only granted for: AAST355, AAST398L or AMST328W. Formerly: 398L.

Explores how Asian Americans have historically been represented in the U.S. by Hollywood, and in turn, how independent and Hollywood Asian American filmmakers have represented themselves. It covers the history of racial, gendered, and sexualized representations of Asian Americans in Hollywood, as well as Asian American filmic responses within and outside Hollywood. It also introduces how four basic tools of film analysis mise-en-scene, cinematography, editing and sound work together to create meaning in moving images. It examines how these elements are put together in three different types of films by Asian American filmmakers: narrative, documentary, and experimental. How films function in society to circulate ideas that reproduce and challenge stereotypes about Asian Americans.

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0101	Terry Park W 5:00pm - 7:30pm	Seats (Total: 30) ONLINE

AMST328X **(Dis)ability in American Film**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DSSP, DVUP

0101	Susan Pramschufer TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE

AMST340 **Introduction to History, Theories and Methods in American Studies**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed AMST201; and 2 courses in AMST. Restriction: Must be in American Studies program; and sophomore standing or higher.

Introduction to the process of interdisciplinary research, including research literatures, questions, first-hand sources and library and analytic methods in American Studies. Each student will craft a prospectus for original research.

0101	Robert Chester TuTh 9:30am - 10:45am	Seats (Total: 15) ONLINE
0201	Bayley Marquez MW 11:00am - 12:15pm	Seats (Total: 15) ONLINE

AMST386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-American Studies department; and junior standing or higher.

0401	Mary Sies Contact instructor or department for details.	Seats (Total: 10)

AMST388 **Honors Thesis**

(Perm req)

Credits: 3 Grading Method: Regular

Individual research, thesis and oral defense. The research project will be conducted under the supervision of a faculty member.

Contact department for information to register for this course.

AMST398 **Independent Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular

Provides the student with the opportunity to pursue independent, interdisciplinary research and reading in specific areas of American culture studies.

Contact department for information to register for this course.

AMST418H **Cultural Themes in America; Cultural Themes in America-Honors**

(Perm req)

Credits: 3 Grading Method: Regular

Examination of structure and development of American culture through themes such as "growing up American," "culture and mental disorders," "race," "ethnicity," "regionalism," "landscape," and "humor."

Prerequisite: At least three credit hours of prior coursework in AMST.

Contact department for information to register for this course.

AMST428N **American Cultural Eras; Living with Pachamama: Religion and Ritual in the Andes from the Incas to the Present**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Investigation of a decade, period, or generation as a case study in significant social change within an American context. Case studies include "Antebellum America, 1840-1860" and "American culture in the Great Depression."

Cross-listed with HIST428N, LASC448N, and RELS429N. Credit granted for HIST428N, AMST428N, LASC448N, or RELS429N.

0101	James Maffie	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ONLINE

AMST450 **Seminar in American Studies**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

Prerequisite: AMST201 and AMST340; and 1 course in AMST. Restriction: Senior standing; and must be in American Studies program.

Developments in theories and methods of American Studies scholarship, with emphasis upon interaction between the humanities and the social sciences in the process of cultural analysis and evaluation.

Developments in theories and methods of American Studies scholarship, with emphasis upon interaction between the humanities and the social sciences in the process of cultural analysis and evaluation.

0201	Christina Hanhardt	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

AMST498G **Special Topics in American Studies; Latinos/as on the Silver Screen**

Credits: 3 Grading Method: Regular

Topics of special interest.

Cross-listed with USLT498A. Credit granted for AMST498G or USLT498A. Beginning with the era of silent film and concluding with contemporary cinema, we explore the ambiguous and shifting history of U.S. Latina/o/xs both behind and in front of the camera. Combining media theory and film history, the course examines Hollywood studio productions of the mid-20th century and independent, Latinx made films of more recent years.

0101	Robert Chester	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

AMST601 **Introductory Theories and History in American Studies**

Credits: 3 Grading Method: Regular

Restriction: Must not be a Graduate Advanced Special Student.

Explores the formative literature, theories, research approaches, and history of American Studies.

0101	Nancy Mirabal	Seats (Total: 15)
	M 4:00pm - 6:40pm	ONLINE

AMST628F **Seminar in American Studies; Deviance and Dominance in the Study of the City**

Credits: 3 Grading Method: Regular, Audit

Explores how "deviance" has functioned as both an object and a product of different disciplinary and professionalized approaches to understanding the U.S. city from the late 19th century through the present.

0101	Christina Hanhardt	Seats (Total: 15)
	Tu 4:00pm - 6:40pm	ONLINE

AMST655 **Introduction to Museum Scholarship**

Credits: 3 Grading Method: Regular, Audit

Cross-listed with HIST610, ANTH655. Credit only granted for: AMST655, ANTH655, or HIST610.

Provides students a basic understanding of museums as cultural and intellectual institutions. Topics include the historical development of museums, museums as resources for scholarly study, and the museum exhibition as medium for presentation of scholarship.

For Fall 2008: Additionally cross-listed with INST728T. Credit only granted for ANTH655, AMST655, HIST610, or INST728T.

0101	Diana Marsh	Seats (Total: 20)
	Th 2:00pm - 4:45pm	ONLINE

AMST698 **Directed Readings in American Studies**

(Perm req)

Credits: 3 Grading Method: Regular

This course is designed to provide students with the opportunity to pursue independent, interdisciplinary research and reading in specific aspects of American culture under the supervision of a faculty member.

Contact department for information to register for this course.

AMST798 **Non-Thesis Research**

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

AMST799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

AMST857 **Museum Scholarship Practicum**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: AMST856, ANTH856, or HIST810. Restriction: Permission of Museum Scholarship Program required. Cross-listed with ANTH857, HIST811. Credit only granted for: AMST857, ANTH857, or HIST811.

Students devise and carry out a research program using the collections at the Smithsonian Institution or some other cooperating museum, working under joint supervision of a museum professional and a university faculty member.

0401	Mary Sies	Seats (Total: 4)
	Contact instructor or department for details.	

0901	Instructor: TBA	Seats (Total: 2)
	Contact instructor or department for details.	

AMST878A **American Studies Pedagogy Mentoring; Mentoring for First Year Teaching in American Studies**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

This course provides graduate teaching assistants with a structured approach to pedagogical content, techniques, and collaborative practices that they learn and then can use throughout their careers. It also commits a core faculty member to teaching pedagogy and makes it possible for the course to become a formal part of one's load.

Prerequisite: permission of department and must be a current AMST teaching assistant.

0101	La Marr Bruce	Seats (Total: 5)
	Contact instructor or department for details.	

AMST878B **American Studies Pedagogy Mentoring; Mentoring for Second Year Teaching in American Studies**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

This course provides graduate teaching assistants with a structured approach to pedagogical content, techniques, and collaborative practices that they learn and then can use throughout their careers. It also commits a core faculty member to teaching pedagogy and makes it possible for the course to become a formal part of one's load.

Prerequisite: permission of department and must be a current AMST teaching assistant.

0101	La Marr Bruce	Seats (Total: 5)
	Contact instructor or department for details.	

AMST878C **American Studies Pedagogy Mentoring; Mentoring for Third Year Teaching in American Studies**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

This course provides graduate teaching assistants with a structured approach to pedagogical content, techniques, and collaborative practices that they learn and then can use throughout their careers. It also commits a core faculty member to teaching pedagogy and makes it possible for the course to become a formal part of one's load.

Prerequisite: permission of department and must be a current AMST teaching assistant.

0101	La Marr Bruce	Seats (Total: 5)
	Contact instructor or department for details.	

AMST898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

AMST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ANSC Animal Science Fall 2020

The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to contact the instructor, prior to course enrollment, to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required and what alternatives, if any, are available.

ANSC101 **Principles of Animal Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A comprehensive overview of the application of biology in the care and use of animals that live in close association with humans including food animals, companion animals, lab animals, zoo animals, etc. The role of science in modern food production using animals will be emphasized.

0101	Sarah Balcom	Seats (Total: 156)	
	MWF 1:00pm - 1:50pm	ONLINE	

ANSC103 **Principles of Animal Science Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in ANSC101. Restriction: Must be in one of the following programs (Environmental Sci & Pol-Environment & Agriculture; Agricultural and Veterinary Medicine; Agricultural Science and Technology) ; or must be in a major within the AGNR-Animal & Avian Sciences department; or permission of department required for students in other College of AGNR programs.

Laboratory focusing on the application of biology in the care and use of animals that live in close association with humans including food animals, companion animals, lab animals, zoo animals, etc. Labs will include live animals. Offered in fall semester only.

Students must pay a $50.00 laboratory materials fee.

0201	Megan McLean	Seats (Total: 20)	
	Tu 2:00pm - 3:50pm	ANS 1144	Lab

0301	Megan McLean F 10:00am - 11:50am	Seats (Total: 20) ANS 1144	Lab
0401	Megan McLean Th 2:00pm - 3:50pm	Seats (Total: 20) ANS 1144	Lab
0501	Megan McLean W 3:00pm - 4:50pm	Seats (Total: 20) ANS 1144	Lab
0701	Megan McLean W 10:00am - 11:50am	Seats (Total: 20) ANS 1144	Lab

ANSC204 **Anatomy of Domestic Animals**

Credits: 2 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103. And BSCI105; or (BSCI170 and BSCI171). Corequisite: ANSC205. Restriction: Must be in one of the following programs (Environmental Sci&Pol-Wildlife Resources & Cons; Animal Sciences: Animal Care & Management; Animal Sciences: Equine Studies; Animal Sciences: Laboratory Animal Care; Animal Sciences: Sciences/Preprofessional; Animal Sciences: Animal Biotechnology; Agricultural and Veterinary Medicine). Credit only granted for: ANSC211 or ANSC204 AND ANSC205. Formerly: ANSC211.

Covering the anatomy of major species of domestic animals. Utilizes a systemic approach to provide a general knowledge of both gross and microscopic mammalian structure. Comparative differences between the major domestic species are covered.

0101	Angela Black MW 2:00pm - 2:50pm	Seats (Total: 110) ONLINE	

ANSC205 **Anatomy of Domestic Animals Laboratory**

Credits: 2 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103. And BSCI105; or (BSCI170 and BSCI171). Corequisite: ANSC204. Restriction: Must be in one of the following programs (Environmental Sci&Pol-Wildlife Resources & Cons; Animal Sciences: Animal Care & Management; Animal Sciences: Equine Studies; Animal Sciences: Laboratory Animal Care; Animal Sciences: Sciences/Preprofessional; Animal Sciences: Animal Biotechnology; Agricultural and Veterinary Medicine). Credit only granted for: ANSC211 or ANSC204 and ANSC205. Formerly: ANSC211.

A regional approach is taken to study the gross anatomy of major domestic species in the laboratory portion of this course.

Students must pay a $50.00 laboratory materials fee.

0101	Angela Black Tu 9:00am - 12:00pm	Seats (Total: 22) ONLINE	Lab
0102	Angela Black Tu 1:00pm - 4:00pm	Seats (Total: 22) ONLINE	Lab
0103	Angela Black Th 9:00am - 12:00pm	Seats (Total: 22) ONLINE	Lab
0104	Angela Black Th 1:00pm - 4:00pm	Seats (Total: 22) ONLINE	Lab

ANSC210 **Veterinary Terminology**

Credits: 1 Grading Method: Regular, Audit

Prerequisite: ANSC204 and ANSC205. Credit only granted for: The course is offered on-line through a series of self-paced modules on ELMS..

Students will learn terminology related to the clinical practice of small and large animal medicine including medical record terminology and a systems-based consideration of common practices and pathologies.

0101	Sarah Balcom Class time/details on ELMs	Seats (Total: 80) ONLINE	

ANSC220 **Livestock Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC101 and ANSC103.

Management of meat animals including beef, sheep, and swine. This course will emphasize obtaining optimal efficiency of production through the integration of leading edge breeding, feeding, management, and marketing practices.

0101	R Apter Class time/details on ELMs	Seats (Total: 40) ONLINE	

ANSC227 **Eating with Eyes Wide Open**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS, SCIS

Students will investigate the tension that is created by trade-offs that, knowingly or not, are made by consumers relative to agricultural production methods and dietary choices. Course will inform students about their food supply so they can make informed decisions and practice intentional or informed eating.

0101	R Apter	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0102	R Apter	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0103	R Apter	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

ANSC232 **Horse Management**

Credits: 3 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103. Credit only granted for: ANSC232 or ANSC332. Formerly: ANSC332.

An introductory course on the care, management, and use of horses. Major topics include the industry, breeds, conformation, feeding, health, reproduction, facilities and business.

Students must pay a $50.00 lab materials fee.

0101	Amy Burk	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	W 1:00pm - 2:50pm	ANS 1144	Lab
0102	Amy Burk	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	Th 9:00am - 10:50am	ANS 1144	Lab

ANSC252 **Introduction to the Diseases of Wildlife**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI105; or (BSCI170 and BSCI171); or permission of AGNR-Animal & Avian Sciences department; or students who have taken courses with comparable content may contact the department.

The principal diseases of North American wildlife will be briefly considered. For each disease, specific attention will be given to the following: signs evidenced by the affected animal or bird, causative agent, means of transmission and effects of the disease on the population of the species involved.

Offered fall only.

0101	Cindy Driscoll	Seats (Total: 80)	
	M 4:00pm - 5:50pm	ONLINE	
	M 6:00pm - 6:50pm	ONLINE	Discussion

ANSC255 **Introduction to Aquaculture**

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: ANSC101 and ANSC103; or must have completed an introductory biology course.

Introduces the art and science of rearing aquatic animals and the essential principles of aquaculture. Students receive hands-on training in the methods required for successful husbandry and management of aquatic animals in their water environment.

Students must pay a $50.00 lab materials fee.

0101	Daniel Theisen, Mohamed Salem	Seats (Total: 20)
	TuTh 11:00am - 12:50pm	ANS 1144

ANSC314 **Comparative Animal Nutrition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC101 and ANSC103; and (CHEM231 or PLSC275).

The fundamental role and implications of dietary preference, gastrointestinal physiology and nutrients in animal nutrition. Biochemical roles of nutrients in metabolism, digestion, absorption and assimilation as it relates to various life processes.

Offered fall only.

0101	Nishanth Sunny	Seats (Total: 88)
	MWF 9:00am - 9:50am	ONLINE

ANSC359 **Internship Experience in Animal and Avian Sciences**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail General Education: DSSP

Experiential learning is a key component in an animal science education. Through the internship program, you will have the opportunity to develop your expertise in a specific species and discipline within the animal science curriculum. You will arrange an on- or off-campus internship experience related to animal science. You will spend a specified number of hours at the internship site each week and attend biweekly classroom sessions where we will discuss how the study of animal science fits into your specific internship experience as well as understand how to achieve each of the course learning outcomes.

Prerequisite: ANSC220, ANSC232, ANSC242, ANSC250, ANSC255, ANSC260, or ANSC262. Restriction: Must be in a major within the AGNR-Animal & Avian Sciences department; and permission of instructor.

0101	Monica VanKlompenberg Tu 3:30pm - 5:30pm	Seats (Total: 20) ONLINE	
0201	Sarah Balcom Sa 9:00am - 11:00am	Seats (Total: 10) ANS 0408	

ANSC379 **Animal Science Undergraduate Teaching Assistant Seminar**

(Perm req)

Credits: 2 Grading Method: Regular

Seminar course for undergraduate teaching assistants within ANSC.

0101	Sarah Balcom W 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 15) ONLINE ONLINE	 Lab

ANSC388 **Honors Thesis Research**

Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

0701	Chad Stahl Class time/details on ELMs	Seats (Total: 5) ONLINE
2501	Richard Kohn Class time/details on ELMs	Seats (Total: 5) ONLINE

5201	Amy Burk Class time/details on ELMs	Seats (Total: 5) ONLINE
7101	Shawna Weimer Class time/details on ELMs	Seats (Total: 5) ONLINE
7107	Chad Stahl Class time/details on ELMs	Seats (Total: 5) ONLINE

ANSC389 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Contact department for information to register for this course.

ANSC399 **Special Problems in Animal Science**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Work assignments are designed to be proportional to the amount of credit. Students are expected to develop an abstract, fact sheet, manuscript, oral presentation, poster, webpage, journal-log, or other scholarly product associated with their study and/or project.

Contact department for information to register for this course.

ANSC410 **The Gut Microbiome and its Roles in Health and Disease**

Credits: 3 Grading Method: Regular

Prerequisite: BSCI223, ANSC212, ANSC327, EPIB301, BSCI222, BSCI421, or NFSC430; or students who have taken courses with comparable content may contact the department. Credit only granted for: ANSC489M or ANSC410. Formerly: ANSC489M.

A comprehensive perspective of the role of gut microbiome/microflora in nutrition, metabolism, disease prevention and health issues including farm animal health and food value, and human gastrointestinal health and immunity.

0101	Debabrata Biswas TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE

ANSC417 **Regulatory Issues in Animal Care and Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC220, ANSC232, ANSC242, ANSC250, ANSC255, ANSC260, ANSC262, or ANSC282; or permission of instructor. Additional information: Field trips may be required for this course.

A study of regulatory issues affecting animal care and management in the livestock industry. Guest speakers and classroom discussions will focus on key topics including animal welfare, feed and drug regulations, animal identification, CAFO management, processing and marketing of animal products.

0101	Monica VanKlompenberg	Seats (Total: 20)	
	TuTh 12:30pm - 1:45pm	ONLINE	

ANSC446 **Physiology of Mammalian Reproduction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC212 or BSCI440.

Anatomy and physiology of reproductive processes in domesticated and wild mammals.

0101	Monica VanKlompenberg	Seats (Total: 80)	
	TuTh 2:00pm - 3:15pm	ONLINE	

ANSC447 **Physiology of Mammalian Reproduction Laboratory**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in ANSC446.

Gross and micro-anatomy, artificial insemination, estrous cycle synchronization and invitro-fertilization procedures and analytical techniques useful in animal management and reproduction.

Students must pay a $50.00 laboratory materials fee.

0101	Megan McLean	Seats (Total: 30)	
	F 1:00pm - 2:50pm	ONLINE	Lab

ANSC450 **Animal Breeding Plans**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC101; and 1 course with a minimum grade of C- from (MATH120, MATH130, MATH136, MATH140). Restriction: Junior standing or higher.

Design of animal breeding programs for the genetic improvement of livestock and companion animal species. Principles of population and quantitative genetics. Genetic evaluations of animals, selection strategies and crossbreeding systems. Incorporation of statistics and biotechnology into animal breeding plans.

0101	Monica VanKlompenberg	Seats (Total: 35)	
	MWF 3:00pm - 3:50pm	ONLINE	

ANSC455 **Applied Animal Behavior**

Credits: 3 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103; or BSCI106; or (BSCI160 and BSCI161).

Principles of animal behavior applied to production systems in animal agriculture.

Offered fall only.

0101	R Apter	Seats (Total: 55)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

ANSC460 **Comparative Vertebrate Immunology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC212, BSCI201, or BSCI440. Credit only granted for: ANSC460 or ANSC489I. Formerly: ANSC489I.

Basic concepts in immunology, and comparing immunity in different vertebrates, including organization of immune systems, innate and adaptive immune responses. Special attention will be paid to how cell-mediated and humoral immune responses are induced in natural infections, and what are the effector mechanisms in both of these processes. Immune response in representative disease models such as infections with viruses and bacteria, cancer, and autoimmune disease will be discussed. Lectures concerning cutting-edge research will also be given.

0101	Zhengguo Xiao	Seats (Total: 35)	
	TuTh 2:00pm - 3:15pm	ONLINE	

ANSC489 **Current Topics in Animal Science**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Examination of current developments in the animal sciences.

Contact department for information to register for this course.

ANSC660 **Poultry Literature**

Credits: 1-4 Grading Method: Regular, Audit

Readings on individual topics are assigned. Written reports required. Methods of analysis and presentation of scientific material are discussed.

Contact department for information to register for this course.

ANSC688I **Special Topics; Comparative Vertebrate Immunology**

Credits: 3 Grading Method: Regular, Audit

Lectures, experimental courses, and other special subjects in the fields of animal sciences and veterinary medicine.

0101	Zhengguo Xiao	Seats (Total: 10)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	Th 3:30pm - 4:20pm	ONLINE	Discussion

ANSC688M **Special Topics**

Credits: 1-4 Grading Method: Regular, Audit

Lectures, experimental courses, and other special subjects in the fields of animal sciences and veterinary medicine.

0101	Debabrata Biswas	Seats (Total: 10)
	TuTh 9:30am - 10:45am	ONLINE

ANSC698C **Seminar; Recent Advances in Animal and Avian Sciences**

Credits: 1 Grading Method: Regular, Audit

Students are required to prepare papers based upon current scientific publications relating to animal science, or upon their research work, for presentation before and discussion by the class; (1) recent advances; (2) nutrition; (3) physiology; (4) biochemistry.

0101	Richard Kohn	Seats (Total: 25)
	Tu 3:30pm - 5:30pm	ONLINE

ANSC698D **Seminar; Developing Presentation Skills**

Credits: 1 Grading Method: Regular, Audit

Students are required to prepare papers based upon current scientific publications relating to animal science, or upon their research work, for presentation before and discussion by the class; (1) recent advances; (2) nutrition; (3) physiology; (4) biochemistry.

0101	Richard Kohn	Seats (Total: 12)	
	Tu 3:30pm - 5:30pm	ONLINE	
	Th 3:30pm - 4:30pm	ONLINE	Discussion

ANSC699 **Special Problems in Animal Science**

(Perm req)

Credits: 1-2 Grading Method: Regular, Audit

Work assigned in proportion to amount of credit. Prerequisite: approval of staff. Problems will be assigned which relate specifically to the character of work the student is pursuing.

Contact department for information to register for this course.

ANSC799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ANSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ANSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ANTH Anthropology Fall 2020

ANTH210 **Introduction to Medical Anthropology and Global Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP

An introduction to the central concepts in medical anthropology and the anthropology of global health. This course is a survey of anthropological notions of health, disease, and the body in cross-cultural and global contexts, including classic and contemporary texts. It will provide an examination of systems of knowledge and practice with regard to illness, healing, and global health inequities.

0101	Andrea Lopez	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0102	Andrea Lopez	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0103	Andrea Lopez	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0104	Andrea Lopez	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0105	Andrea Lopez	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0106	Andrea Lopez	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

ANTH221 **Introduction to Forensic Sciences**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Credit only granted for: ANTH298A or ANTH221. Formerly: ANTH298A.

Provides a brief history of forensic sciences, an introduction to some of the techniques used, and a demonstration of some of the applications of forensic sciences. A survey course designed to give the student some exposure to the kinds of scientific knowledge and techniques applied to the medico-legal investigation of death and other crimes.

FC01	Erin Guthrie TuTh 6:00pm - 7:15pm *Restricted to students in Freshman Connection.*	Seats (Total: 24) ONLINE	

ANTH222 **Introduction to Ecological and Evolutionary Anthropology**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: LL | General Education: DSNL, DVUP

Credit only granted for: ANTH220 or ANTH222.

An introduction to the evolution of human physiology and human behavior, the relationship between hominid and non-hominid primates, and the study of relationships between a population of humans and their biophysical environment.

0101	L Jen Shaffer Class time/details on ELMs M 8:00am - 10:00am	Seats (Total: 20) ONLINE ONLINE	Lab
0102	L Jen Shaffer Class time/details on ELMs M 11:00am - 1:00pm	Seats (Total: 20) ONLINE ONLINE	Lab
0103	L Jen Shaffer Class time/details on ELMs M 2:00pm - 4:00pm	Seats (Total: 20) ONLINE ONLINE	Lab
0104	L Jen Shaffer Class time/details on ELMs W 8:00am - 10:00am	Seats (Total: 20) ONLINE ONLINE	Lab
0105	L Jen Shaffer Class time/details on ELMs W 11:00am - 1:00pm	Seats (Total: 20) ONLINE ONLINE	Lab
0106	L Jen Shaffer Class time/details on ELMs W 2:00pm - 4:00pm	Seats (Total: 20) ONLINE ONLINE	Lab

ANTH240 **Introduction to Archaeology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB, D | General Education: DSHS, DVUP

Exploration of the variety of past human societies and cultures through archaeology, from the emergence of anatomically modern humans to the more recent historical past.

0301	Mark Leone MWF 11:00am - 11:50am	Seats (Total: 35) ONLINE	
FC01	Kevin Gibbons MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 24) ONLINE	

ANTH260 **Introduction to Sociocultural Anthropology and Linguistics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB, D | General Education: DSHS, DVUP

Culture and social relationships in a wide variety of settings from small-scale to complex societies. An overview of how anthropology analyzes human behavior. Particular attention to the relationship between language and culture.

0101	Yancey Orr Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ONLINE ONLINE	 Discussion
0102	Yancey Orr Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 19) ONLINE ONLINE	 Discussion
0103	Yancey Orr Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 19) ONLINE ONLINE	 Discussion
0104	Yancey Orr Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 19) ONLINE ONLINE	 Discussion
0105	Yancey Orr Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 19) ONLINE ONLINE	 Discussion
0106	Yancey Orr Class time/details on ELMs F 2:00pm - 2:50pm	Seats (Total: 19) ONLINE ONLINE	 Discussion

ANTH263 **Sexuality and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

Credit only granted for: ANTH298K or ANTH263. Formerly: ANTH298K.

An overview of sexuality from an anthropological perspective, looking at aspects of sexuality within our own culture and in cultures around the world. Course topics include the biology and culture of sex, gender, physical attraction, sexual orientation, marriage and mating taboos, fertility control, sexually transmitted diseases, and commercial aspects of sex.

FCB1	Jeanne Hanna Tu 6:00pm - 7:15pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 26) ONLINE ONLINE	

ANTH264 **Immigration Policy, Immigrant Lives**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP, SCIS

Cross-listed with: IMMR219C. Credit only granted for: ANTH264 or IMMR219C.

An examination of the phenomenon of international migration, or immigration. Students develop awareness of how immigration has been framed in the general public and examined by social science disciplines, most prominently anthropology. Examination of case studies of different immigrant groups in distinct geographic contexts will illuminate the varied incorporation experiences of immigrants into U.S. society.

Cross-listed with IMMR219C. Credit granted for ANTH264 or IMMR219C.

0101	Christina Getrich Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Christina Getrich Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Christina Getrich Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

ANTH265 **Anthropology of Global Health**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB	General Education: DSHS, DVUP, SCIS

An overview of the growing field of global health including health care systems, medical practices, ideas about illness in cross-cultural contexts, issues of health development, global health inequity, and human rights issues. The course will focus on the history of global health, the critique of major international health agencies and their development paradigms, and the political economy of social inequalities and health.

0101	Thurka Sangaramoorthy Class time/details on ELMs	Seats (Total: 25) ONLINE	
FCB1	Kyla Cools Tu 7:30pm - 8:45pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 26) ONLINE ONLINE	 Discussion

ANTH266 **Changing Climate, Changing Cultures**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB	General Education: DSHS, DVCC, SCIS

Explore past, present, and future interactions between humans and climate. Discussions, methods-oriented activities, and case study analyses provide students a foundation for appreciating the role of anthropology in understanding, responding to, and preparing for climate change.

FCB1	Jana Kopelentova Rehak Class time/details on ELMs Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 26) ONLINE ONLINE

ANTH305 **Archaeological Methods and Practice**

Credits: 3	Grading Method: Regular	General Education: DSHS

Prerequisite: ANTH240, ARTH200, or CLAS180. Cross-listed with: ARTH305, CLAS305, JWST319Y. Credit only granted for: ANTH305, ARTH305, CLAS305, or JWST319Y.

A team-taught, interdisciplinary course discussing theories, methods, and ethical issues in the practice of archaeology.

0101	Jorge Bravo TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

ANTH322 **Method and Theory in Ecological Anthropology**

Credits: 3 Grading Method: Regular

Prerequisite: ANTH220 or ANTH222. Restriction: Must be in a major within the BSOS-Anthropology department. Credit only granted for: ANTH320, ANTH322, ANTH425, or ANTH625.

A theoretical consideration of ecological anthropology, focusing on issues related to cooperation, the management of common property, resilience, and sustainability. Explores the methods of sociocultural anthropology, including ethnology, evolutionary game theory and agent-based modeling; and natural-science approaches including behavioral and systems ecology.

0101	L Jen Shaffer Th 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 35) ONLINE ONLINE

ANTH323 **Plagues, Pathogens and Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

Credit only granted for: ANTH429A or ANTH323. Formerly: ANTH429A.

The impact of diseases on populations from prehistoric times through the present will be examined, along with public perceptions of disease, scientific breakthroughs on treatment and prevention, and the ways that politics and public health policies can enhance or impede the advancement of disease treatment. The natural history of disease, population structure, and immunity will be discussed. The class will address emerging and re-emerging diseases and the ways that first responders, researchers, and policy makers may affect the outcome of an outbreak.

0101	Thurka Sangaramoorthy Class time/details on ELMs	Seats (Total: 25) ONLINE
FC01	Tanya Icaza MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE

ANTH358A **Undergraduate Teaching Assistant; Undergraduate Teaching Assistant in Archaeology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Individual instruction course: contact department or instructor to obtain section and index numbers.

Contact department for information to register for this course.

ANTH358B **Undergraduate Teaching Assistant; Undergraduate Teaching Assistant in Bio-Anthropology**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Individual instruction course: contact department or instructor to obtain section and index numbers.

Contact department for information to register for this course.

ANTH358C **Undergraduate Teaching Assistant; Undergraduate Teaching Assistant in Cultural Anthropology**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Individual instruction course: contact department or instructor to obtain section and index numbers.

Contact department for information to register for this course.

ANTH360 **Method and Theory in Sociocultural Anthropology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANTH260. Restriction: Must be in Anthropology program; or permission of BSOS-Anthropology department.

Theoretical approaches and research methods in sociocultural anthropology. Emphasis on current debates, new directions, and their historical antecedents.

0101	Andrea Lopez	Seats (Total: 35)	
	Class time/details on ELMs	ONLINE	

ANTH380 **Culture and Discourse**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Contemporary discourse analysis and pragmatics applied to ethnographic research problems with particular attention to roots in recent linguistic anthropological work in ethnographic semantics and ethnography of speaking.

ESG1	Jacqueline Messing	Seats (Total: 35)	
	F 10:00am - 11:15am	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Restricted to COMM majors at Shady Grove.		

ANTH386 **Experiential Learning**

(Perm req)

Credits: 1-6

Grading Method: Regular, Pass-Fail

Recommended: Completion of advanced courses in relevant subfield of anthropology recommended. Restriction: Permission of BSOS-Anthropology department; and junior standing or higher; and must be in Anthropology program.

Contact department for information to register for this course.

ANTH398A **Independent Study; Research Problems**

(Perm req)

Credits: 1-3

Grading Method: Regular

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398C **Independent Study; The Mediterranean World**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398E **Independent Study; Bodies and Burials**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398G **Independent Study; Ethnicity, Race and Nationality in Europe**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398H **Independent Study; Social Anthropology of Britain (Honors)**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398I **Independent Study; Great Kingdoms of Ancient Near East**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398J **Independent Study; Archaeology Practicum**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398K **Independent Study; Archaeology of Roman Identity**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398L **Independent Study; Social Anthropology of Britain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398N **Independent Study; Career Development for Anthropology Majors**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

0101	Erik Hanson	Seats (Total: 15)
	Th 3:30pm - 4:45pm	ONLINE

ANTH413 **Health Disparities in the United States**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH468Q, ANTH688Q, ANTH413, or ANTH613. Formerly: ANTH468Q.

Powerful economic, political, social, and cultural forces shape who gets sick, what illnesses/diseases they get, how they are treated while seeking care, what treatment options they have, and what their ultimate health outcomes are. The goal of the course is to understand these processes through the lens of critical medical anthropology

0101	Christina Getrich	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

ANTH415 **Advanced Studies in Global Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: ANTH210, ANTH310, or ANTH265 or a similar course focused on global health or medical anthropology course. Jointly offered with: ANTH615. Credit only granted for: ANTH415 or ANTH615.

Extends understandings of diverse health conditions facing world populations today and the science being made around them. Critically examines key issues in global aid and public health, with an emphasis on the theories, concepts, and methods of anthropology.

0101	Matthew Thomann	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ANTH436 **Norse Archaeology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH436 or ANTH636.

The archaeology of the Norse world from the 8th century through to the end of the 11th century. We will investigate the possible causes of the Norse expansion out of Scandinavia. The various settlements and colonies of Norse Russia, the Baltic, Britain, Ireland and the North Atlantic Islands (Orkney, the Shetlands, the Faroes, Iceland, Greenland and Newfoundland) will be examined. While we will look at the Norse in detail we will also attempt to put their raiding, trading, and settlements into a larger Eurasian context through a study of the archaeology of this period.

0101	George Hambrecht	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	MMH 1400

ANTH447 **Material Culture Studies in Archaeology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: ANTH240. Credit only granted for: ANTH447, ANTH448C, ANTH647, or ANTH689C. Formerly: ANTH448C.

An in-depth introduction to the world of material culture studies with a focus on the methods and theories in historical archaeology. Students will look at archaeological data as historical documents, commodities and as symbols expressing ideas.

0101	Stephen Brighton	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

ANTH451 **Environmental Archaeology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Credit only granted for: ANTH451, ANTH651, ANTH448F, ANTH668F. Formerly: ANTH448F.

An overview of modern environmental archaeology as a tool for the, interdisciplinary investigation of past and present global change and, to engage the long term past with current issues of sustainability and, rapid environmental change.

0101	George Hambrecht	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ARM 0131

ANTH453 **Archaeology of the Modern City**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANTH240; or permission of instructor. Credit only granted for: ANTH448Q or ANTH453. Formerly: ANTH448Q.

An overview of how social scientists, in particular historical archaeologists, approach modern cities as being part of the materiality of the social structure and order.

0101	Stephen Brighton	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	ONLINE

ANTH461 **Language as Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Jointly offered with: ANTH661. Credit only granted for: ANTH461, ANTH468I or ANTH661. Formerly: ANTH468I.

An introduction to linguistic variation and the construction of identity, relationship, and community membership through language use. The approach emphasizes language as community-based practice and examines the dynamic construction of social relations through linguistic interactions.

0101	Janet Chernela	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ANTH462 **Amazon Through Film**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH468D or ANTH462. Formerly: ANTH468D.

An interdisciplinary course that utilizes film to consider the Amazon basin, its history, peoples, and landscapes through cinematic representations. The course places the films in the context of film history and critical theory. The course takes into consideration the Brazilian, North American, Mexican, European and Argentine creators of the films and their visions of Amazonia, as well as the audiences and markets to which the films are intended.

0101	Janet Chernela	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

ANTH465 **Ethnoecology: Nature, Knowledge and People**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduces theory and methodology from ethnoecology, the study of human relationships with and knowledge about the environment. Students will examine human relationships with both biotic (e.g. plants and animals) and abiotic (e.g. glaciers, weather) elements of ecological systems to better understand how knowledge frameworks and cultural practices shape human experiences of the natural world. The history of ethnoecology as a discipline will be covered, before moving to case studies where different ecological knowledge systems come into contact via conservation projects, bioprospecting, and other contemporary issues. Involves both discussion and project-based learning with GIS, cultural domain analysis, and ethnographic methods.

0101	Madeline Brown	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	ONLINE

ANTH476 **Senior Research**

(Perm req)

Credits: 3-4 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Anthropology program. Credit only granted for: ANTH476 or ANTH486.

Capstone course in which students pursue independent research into a current problem in anthropology, selected with assistance of a committee of faculty. Research leads to the writing of a senior thesis in anthropology.

Contact department for information to register for this course.

ANTH477 **Senior Thesis**

(Perm req)

Credits: 3-4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANTH476. Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program. Credit only granted for: ANTH477 or ANTH487.

Capstone course in which students write a senior thesis on independent research into a current problem in anthropology. The thesis is defined before a committee of faculty.

Contact department for information to register for this course.

ANTH485 **Honors Research Preparation**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program; and must be admitted to University Honors Program or Anthropology Honors Program.

Honors Research Preparation is an independent study course during which the Honors candidate will work with their Honors Thesis Advisor to establish not only the structure of the thesis and timeline, but also the formation of Thesis Review Committee.

Contact department for information to register for this course.

ANTH486 **Honors Research**

(Perm req)

Credits: 3-4 Grading Method: Regular

Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program; and must be admitted to University Honors Program or Anthropology Honors Program. Credit only granted for: ANTH486 or ANTH476.

Capstone course in which students pursue independent research into a current problem in anthropology, selected with assistance of a committee of faculty. Research leads to the writing of an honors thesis in anthropology.

Contact department for information to register for this course.

ANTH487 **Honors Thesis**

(Perm req)

Credits: 3-4 Grading Method: Regular

Prerequisite: ANTH486. Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program; and must be admitted to University Honors Program or Anthropology Honors Program. Credit only granted for: ANTH487 or ANTH477.

Capstone course in which students write a thesis on the results of independent research into a current problem in anthropology.

Contact department for information to register for this course.

ANTH601 **Applied Anthropology**

Credits: 3 Grading Method: Regular

An overview of the history and current practices of applied anthropology. This includes relationships between applied anthropology and other major subfields of the profession; the interdisciplinary and public context of applied anthropology; and problems of significance, utility, and ethics associated with applied anthropology.

Offered fall only. For ANTH majors only.

0101	Mary Butler	Seats (Total: 20)
	Tu 4:00pm - 6:40pm	ONLINE

ANTH613 **Health Disparities in the United States**

Credits: 3 Grading Method: Regular, Audit

Jointly offered with ANTH413. Credit only granted for: ANTH413, ANTH469 Q, ANTH689Q, or ANTH613. Formerly: ANTH689Q.

Powerful economic, political, social, and cultural forces shape who gets sick, what illnesses/diseases they get, how they are treated while seeking care, what treatment options they have, and what their ultimate health outcomes are. The goal of the course is to understand these processes through the lens of critical medical anthropology

0101	Christina Getrich	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ONLINE

ANTH615 **Advanced Studies in Global Health**

Credits: 3 Grading Method: Regular, Audit

Jointly offered with: ANTH415. Credit only granted for: ANTH415 or ANTH615.

Extends understandings of diverse health conditions facing world populations today and the science being made around them. Critically examines key issues in global aid and public health, with an emphasis on the theories, concepts, and methods of anthropology.

0101	Matthew Thomann	Seats (Total: 8)
	Class time/details on ELMs	ONLINE

ANTH620 **Environment and Society**

Credits: 3 Grading Method: Regular, Audit

Students will obtain foundational knowledge of core social science theories and approaches dealing with coupled natural-human systems. Key topics include: cultural models of the environment, social networks, ecological economics, political ecology, environmental justice, and science communication.

Cross-listed with MEES620. Credit only granted for ANTH620 or MEES620.

0101	Kenneth Rose, William Dennison, Elizabeth Van Dolah	Seats (Total: 20)
	Th 2:00pm - 4:45pm	ONLINE

ANTH636 **Norse Archaeology**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ANTH436 or ANTH636.

The archaeology of the Norse world from the 8th century through to the end of the 11th century. We will investigate the possible causes of the Norse expansion out of Scandinavia. The various settlements and colonies of Norse Russia, the Baltic, Britain, Ireland and the North Atlantic Islands (Orkney, the Shetlands, the Faroes, Iceland, Greenland and Newfoundland) will be examined. While we will look at the Norse in detail we will also attempt to put their raiding, trading, and settlements into a larger Eurasian context through a study of the archaeology of this period.

0101	George Hambrecht	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	MMH 1400

ANTH647 **Advanced Material Culture Studies in Archaeology**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ANTH447, ANTH448C, ANTH647, or ANTH689C. Formerly: ANTH689C.

An in-depth introduction to the world of material culture studies with a focus on the methods and theories in historical archaeology. Students will look at archaeological data as historical documents, commodities and as symbols expressing ideas.

0101	Stephen Brighton TuTh 12:30pm - 1:45pm	Seats (Total: 10) ONLINE

ANTH651 **Environmental Archaeology**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ANTH448F, ANTH451, ANTH688F, or ANTH651. Formerly: ANTH688F.

An overview of modern environmental archaeology as a tool for the interdisciplinary investigation of past and present global change and to engage the long term past with current issues of sustainability and rapid environmental change.

0101	George Hambrecht TuTh 11:00am - 12:15pm	Seats (Total: 10) ARM 0131

ANTH653 **Archaeology of the Modern City**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ANTH240; or permission of instructor. Credit only granted for: ANTH653, ANTH448Q or ANTH453. Formerly: ANTH448Q.

An overview of how social scientists, in particular historical archaeologists, approach modern cities as being part of the materiality of the social structure and order.

0101	Stephen Brighton TuTh 3:30pm - 4:45pm	Seats (Total: 5) ONLINE

ANTH655 **Introduction to Museum Scholarship**

Credits: 3 Grading Method: Regular, Audit

Cross-listed with AMST655, HIST610. Credit only granted for: ANTH655, AMST655, or HIST610.

Provides students a basic understanding of museums as cultural and intellectual institutions. Topics include the historical development of museums, museums as resources for scholarly study, and the museum exhibition as medium for presentation of scholarship.

For Fall 2008: Additionally cross-listed with INST728T. Credit only granted for ANTH655, AMST655, HIST610, or INST728T.

0101	Diana Marsh	Seats (Total: 20)
	Th 2:00pm - 4:45pm	ONLINE

ANTH661 **Language as Practice**

Credits: 3 Grading Method: Regular, Audit

Jointly offered with: ANTH461. Credit only granted for: ANTH468I, ANTH461, or ANTH661.

An introduction to linguistic variation and the construction of identity, relationship, and community membership through language use. The approach emphasizes language as community-based practice and examines the dynamic construction of social relations through linguistic interactions.

0101	Janet Chernela	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

ANTH688A **Current Developments in Anthropology**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Detailed investigation of a current problem or research technique, the topic to be chosen in accordance with faculty interests and student needs.

Contact department for information to register for this course.

ANTH688E **Ethnoecology: Nature, Knowledge and People**

Credits: 3 Grading Method: Regular, Audit

Introduces theory and methodology from ethnoecology, the study of human relationships with and knowledge about the environment. Students will examine human relationships with both biotic (e.g. plants and animals) and abiotic (e.g. glaciers, weather) elements of ecological systems to better understand how knowledge frameworks and cultural practices shape human experiences of the natural world. The history of ethnoecology as a discipline will be covered, before moving to case studies where different ecological knowledge systems come into contact via conservation projects, bioprospecting, and other contemporary issues. Involves both discussion and project-based learning with GIS, cultural domain analysis, and ethnographic methods.

0101	Madeline Brown	Seats (Total: 10)
	TuTh 3:30pm - 4:45pm	ONLINE

ANTH689A **Special Problems in Anthropology**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ANTH701 **Anthropology Internship Preparation**

Credits: 3 Grading Method: Regular, Audit

Preparation for internship includes practicum training in development, presentation and evaluation of position papers, proposals and work plans; literature search and use of secondary data sources in decision making the effect cultural analysis and resource management; ethics and professional development for work in non-academic settings.

Contact department for information to register for this course.

ANTH712 **Anthropology Internship Analysis**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ANTH789.

The preparation and presentation of internship results, and the development of skills in report writing and presentation. Includes the completion of a professional quality report or publishable paper based on the internship experience.

Contact department for information to register for this course.

ANTH740 **Theories of the Past and Accomplishments of Archaeology**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Credit only granted for: ANTH689P or ANTH740. Formerly: ANTH689P.

The primary purpose is to highlight some of the key achievements made by archaeologists in informing questions of interest to society from 1850 on. Key achievements include how archaeologists understand elements of the past thought to be central to the development of modern socieity. A secondary purpose is to introduce students to the theories used to understand the place of the past in society and the function of answers to questions thought central to modern social life.

0101	Mark Leone	Seats (Total: 20)
	Th 3:30pm - 6:00pm	ONLINE

ANTH741 **Introduction to Cultural and Heritage Resource Management**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the Cultural and Heritage Resource Management Master or Post-Baccalaureate Certificate of Professional Studies Programs; or by permission of the Anthropology department.

An introduction to the field of cultural and heritage resource management. Examines existing international, national, and local frameworks for the protection of cultural heritage. Provides an overview of employment opportunities and ethical responsibilities within the profession.

PLA1	Matthew Palus	Seats (Total: 20)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE
	Must be in Cultural & Heritage Resource Management Program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.	

ANTH742 **Vital Technologies: Methods, Applications, and Interpretation**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the Cultural and Heritage Resource Management Program (CHRM); or by permission of the Anthropology department.

An examination of the range of nondestructive technologies used to research and image cultural and heritage resources. Standard archaeological survey methods will be covered and will focus on remote sensing technologies and how an integrated approach to archaeological investigation can reveal vital information for resource planning, interpretation, and outreach.

PLA1	Matthew Edwards	Seats (Total: 20)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE
	Must be in Cultural & Heritage Resource Management program For permission to enroll, contact oes@umd.edu.	

ANTH747 **The Business of Cultural & Heritage Resource Management**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the Cultural and Heritage Resource Management Program (CHRM); or by permission of the Anthropology department.

An overview of the skills necessary for success in managing a CHRM program. Students will learn how CHRM organizations market and manage clients, prepare and submit budgets and proposals, and coordinate technical staff to successfully complete projects. Topics will address the range of issues that owners and managers are confronted with in their oversight of projects, including the management of employees, ethics and professional responsibilities, ensuring health and safety, and meeting the many contractual obligations of CHRM projects.

PLA1	Lyle Torp	Seats (Total: 20)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE
	Must be in Cultural & Heritage Resource Management program. For permission to enroll, contact oes@umd.edu.	

ANTH748 **CHRM Project Management**

Credits: 3 Grading Method: Regular, Audit

this capstone class for the MPS in CHRM provides students with a grounding in the critical thinking processes necessary during each stage of the CRHM process. It provides students with insights into the processes used as research questions are translated into data and then into an evaluative report. Students review examples of appropriate and inappropriate technical reports and then analyze the reports to understand the thinking processes necessary for project management to provide the client with the documentation necessary for completing the compliance process.

PLA1	Kelly Hockersmith	Seats (Total: 20)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE
	Must be in Cultural & Heritage Resource Management program. For permission to enroll, contact oes@umd.edu.	

ANTH760 **Development of Social/Cultural Theory**

Credits: 3 Grading Method: Regular, Audit

A broad perspective of the history of social cultural theory in anthropology and the critical skills needed for understanding the subdiscipline is provided. An overview of the history of theorizing about society and culture will help outline the past, present, and future of anthropology and its relations with other scientific and humanistic disciplines.

For Anth majors only.

0101	Yancey Orr M 4:00pm - 6:40pm	Seats (Total: 20) ONLINE

ANTH788 **Internship Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

This course augments ANTH 789 and is graded in conjunction with it.

Contact department for information to register for this course.

ANTH789 **Internship**

(Perm req)

Credits: 3-6 Grading Method: Regular, Audit

Individual instruction course supervised by a department faculty member.

Contact department for information to register for this course.

ANTH857 **Museum Scholarship Practicum**

(Perm req)

Credits: 3-6 Grading Method: Regular

Prerequisite: AMST856, ANTH856, or HIST810. Restriction: Permission of Museum Scholarship Program required. Cross-listed with HIST811, AMST857. Credit only granted for: AMST857, ANTH857, or HIST811.

Students devise and carry out a research program using the collections at the Smithsonian Institution or some other cooperating museum, working under joint supervision of a museum professional and a university faculty member.

0401	Mary Sies Contact instructor or department for details.	Seats (Total: 4)
0901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 2)

ANTH898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ANTH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

AOSC Atmospheric and Oceanic Science Fall 2020

AOSC123 **Causes and Implications of Global Change**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS, SCIS

Cross-listed with GEOL123. Credit only granted for: AOSC123, GEOG123, GEOL123, or METO123. Formerly: METO123.

Responsible policy and decision making on issues related to the global environment requires understanding of the basic scientific issues, relationships between the geophysical and biological sciences, the impacts on regional and global endeavors, and the political manner in which humans respond. This course embodies an integrated introduction to the broad scientific and social aspects of the global change problem.

0101	Jeffrey Henrikson Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Jeffrey Henrikson Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Jeffrey Henrikson Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0104	Jeffrey Henrikson Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0105	Jeffrey Henrikson Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0106	Jeffrey Henrikson Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion

AOSC200 **Weather and Climate**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: PS	General Education: DSNL (if taken with AOSC201), DSNS, SCIS

Prerequisite: MATH107, MATH110, or MATH115. Recommended: Concurrent enrollment in AOSC201. Formerly: METO200.

Broad survey of the state of knowledge and problems of atmospheric science. Origin and structure of the atmosphere, meteorological observations, weather maps, forecasting, satellites, energetics, wind, general circulation, storms, severe weather, climate change, air pollution.

0101	Timothy Canty Class time/details on ELMs W 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0102	Timothy Canty Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0103	Timothy Canty Class time/details on ELMs W 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0104	Timothy Canty Class time/details on ELMs W 2:00pm - 2:50pm *This section is restricted to students in Carillon Communities.*	Seats (Total: 23) ONLINE PHY 1410	Discussion
0201	Jeffrey Henrikson Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 34) ONLINE ONLINE	Discussion
0202	Jeffrey Henrikson Class time/details on ELMs W 3:00pm - 3:50pm	Seats (Total: 34) ONLINE ONLINE	Discussion
0203	Jeffrey Henrikson Class time/details on ELMs M 1:00pm - 1:50pm	Seats (Total: 34) ONLINE ONLINE	Discussion
0204	Jeffrey Henrikson Class time/details on ELMs M 2:00pm - 2:50pm	Seats (Total: 34) ONLINE ONLINE	Discussion

AOSC201 **Weather and Climate Laboratory**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL | General Education: DSNL

Corequisite: AOSC200. Formerly: METO201.

Laboratory exercises to supplement AOSC200, including weather observations, weather map analysis, use of the Internet, forecasting practice and climate modeling.

Students must pay a $60.00 laboratory materials fee.

0101	Hannah Daley Tu 3:30pm - 5:30pm	Seats (Total: 26) ONLINE	Lab
0102	Abby Sebol W 10:00am - 12:00pm	Seats (Total: 26) ONLINE	Lab
0103	Sarah Howard F 10:00am - 12:00pm	Seats (Total: 26) ONLINE	Lab
0104	Benjamin Woods W 4:00pm - 6:00pm	Seats (Total: 26) ONLINE	Lab
0105	Abby Sebol M 2:00pm - 4:00pm	Seats (Total: 26) ONLINE	Lab
0106	Hannah Daley Tu 10:00am - 12:00pm	Seats (Total: 26) ONLINE	Lab
0107	Sarah Howard M 10:00am - 12:00pm	Seats (Total: 26) ONLINE	Lab
0108	Benjamin Woods F 2:00pm - 4:00pm	Seats (Total: 26) ONLINE	Lab

AOSC375 **Introduction to the Blue Ocean**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Cross-listed with GEOL375. Credit only granted for: GEOL375 or METO375.

Oceans are an important component of the Earth System and this course builds towards Earth System Science education. Oceanography is an intrinsically interdisciplinary subject with strong connections to astronomy (tidal forces), biology (ecosystems), geography (world climate), geology (sea floor tectonics), and physics (waves). We begin with the history of ocean exploration and origin of Earth and life and learn about properties of seawater, air-sea interactions, atmospheric and oceanic circulation, El Nino-Southern Oscillation, waves, tides, and tsunamis.

0101	James Carton	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ONLINE

AOSC399 **Independent Study in Academic Peer Mentoring**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Earn academic credit for the time spent supporting an AOSC course in the Academic Peer Mentoring Program (AMP).

Contact department for information to register for this course.

AOSC400 **Physical Meteorology of the Atmosphere**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (PHYS171, PHYS161, MATH141); or permission of CMNS-Atmospheric & Oceanic Science department. Formerly: METO400.

The application of basic classical physics, chemistry and mathematics t the study of the atmosphere. Composition of the atmosphere; energy sources and sinks (radiation in the atmosphere; radiative balance and radiative forcing of atmospheric processes); atmospheric thermodynamics; clouds and precipitation physics; atmospheric electricity and optics; mesoscale processes (e.g., orographic mesoscale phenomena and instabilities); air mass boundaries; severe weather, tropical cyclones; storms; global circulation.

0101	Rachel Pinker	Seats (Total: 32)
	Class time/details on ELMs	ONLINE

AOSC420 **Physical Oceanography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH141 and PHYS141. Recommended: AOSC200. Also offered as: GEOL670, AOSC670. Credit only granted for: AOSC420, AOSC670, or GEOL670.

Ocean observations. Water masses, sources of deep, intermediate, and surface water. Mass, heat, and salt transport, and the meridional overturning circulation. Geochemical tracers and cycles, including carbon. Western boundary currents, mixed layers, and processes maintaining the thermocline. Coastal and estuarine processes. Surface waves and tides. the ocean's role in climate.

0101	Jacob Wenegrat MW 3:15pm - 4:30pm	Seats (Total: 12) ONLINE

AOSC431 **Atmospheric Thermodynamics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (PHYS171, PHYS161, MATH141). Recommended: MATH246. Credit only granted for: AOSC431 or METO431. Formerly: METO431.

Classical thermodynamics applied to both the dry and the moist atmosphere. Composition; phase changes of water; stability concepts; Properties of aerosols and clouds, cloud nucleation and precipitation processes, atmospheric electricity, cloud and precipitation chemistry.

0101	Ning Zeng TuTh 9:30am - 10:45am	Seats (Total: 25) ONLINE
AM01	Ning Zeng TuTh 9:30am - 10:45am	Seats (Total: 1) ONLINE

AOSC433 **Atmospheric Chemistry and Climate**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, CHEM135, or CHEM146. And MATH241; or permission of CMNS-Atmospheric & Oceanic Science department; or permission of CMNS-Chemistry & Biochemistry department. Cross-listed with CHEM433. Credit only granted for: AOSC433, AOSC633, CHEM433, or CHEM633. Formerly: AOSC434.

The effects of human activity on atmospheric composition, focused on global warming, the carbon cycle, air pollution, and the ozone layer. Fundamentals of atmosphereic chemistry (spectroscopy, kinetics, isotopic analysis, and biogeochemical cycles) are related to the modern understanding of climate change, air quality, and ozone depletion, based on resources such as satellite missions, field campaigns, and scientific assessments published by international agencies. We also examine how society's energy needs could be met, in the future, in a manner with less impact on atmospheric composition than the present heavy reliance on combusion of fossil fuels.

0101	Ross Salawitch	Seats (Total: 17)
	TuTh 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE
	Alternating face-to-face/ online class meeting. Please see instructor for details.	

AOSC470 **Synoptic Meteorology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in AOSC431 and AOSC432. Credit only granted for: AOSC470, AOSC600, or METO600.

Atmospheric properties and observations, meteorological analysis and charts, operational numerical forecasts. Application of quasigeostrophic theory, baroclinic instability, midlatitiude and mesoscale weather systems. Tropical meteorology. Weather forecasting using numerical and statistical models. Prediction of weather phenomena on the global, syoptic, meso, and local scales. Analysis of surface and upper air data; Norwegian cyclone model; introduction to weather forecasting.

0101	Jonathan Poterjoy	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

AOSC493 **Senior Research Project I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of CMNS-Atmospheric & Oceanic Science department. Restriction: Must be in Atmospheric and Oceanic Science program; or permission of instructor.

Technical writing and oral presentation skills. Planning, writing, and presenting a plan for research in the geosciences.

0101	Timothy Canty	Seats (Total: 10)
	M 2:00pm - 3:00pm	ONLINE
	F 2:00pm - 3:30pm	ONLINE

AOSC494 **Atmospheric and Oceanic Science Seminar**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in AOSC431 and AOSC432.

Exposure to a wide range of contemporary topics in atmospheric, oceanic, and climate sciences, to foster research interests and promote critical thinking through the weekly AOSC departmental seminar series.

0101	Rachel Pinker Th 3:30pm - 5:00pm	Seats (Total: 20) ONLINE

AOSC498 **Senior Research Project II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The project will be based on the research or development plan created in AOSC493. It may be completed with the approval of a faculty advisor in conjunction with an internship. Final written thesis and oral defense will be expected.

Contact department for information to register for this course.

AOSC499 **Special Problems in Atmospheric Science**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research or special study in the field of meteorology and the atmospheric and oceanic sciences.

Contact department for information to register for this course.

AOSC600 **Synoptic Meteorology I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: AOSC610. Credit only granted for: AOSC470 or AOSC600. Formerly: METO600.

Atmospheric properties and observations, meteorological analysis and charts, operational numerical forecasts. Application of quasigeostrophic theory, baroclinic instability, midlatitude and mesoscale weather systems. Tropical meteorology.

0101	Jonathan Poterjoy Class time/details on ELMs	Seats (Total: 10) ONLINE
AM01	Jonathan Poterjoy Class time/details on ELMs	Seats (Total: 1) ONLINE

AOSC610 **Dynamics of the Atmosphere and Ocean I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in MATH462; or students who have taken courses with comparable content may contact the department. Formerly: METO610.

Equations of motion and their approximation, scale analysis for the atmosphere and the ocean. Conservation properties. Fluid motion in the atmosphere and oceans. Circulation and vorticity, geostrophic motion and the gradient wind balance. Turbulence and Ekman Layers.

0101	Da-Lin Zhang Class time/details on ELMs	Seats (Total: 30) ONLINE
AM01	Da-Lin Zhang Class time/details on ELMs	Seats (Total: 1) ONLINE

AOSC614 **Atmospheric Modeling, Data Assimilation and Predictability**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: AOSC610; or permission of instructor.

Solid foundation for atmospheric and oceanic modeling and numerical weather prediction: numerical methods for partial differential equations, an introduction to physical parameterizations, modern data assimilation, and predictability.

0101	Eugenia Kalnay W 10:00am - 12:30pm	Seats (Total: 20) ONLINE
AM01	Eugenia Kalnay W 10:00am - 12:30pm	Seats (Total: 1) ONLINE

AOSC620 **Physics and Chemistry of the Atmosphere I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH461; or students who have taken courses with comparable content may contact the department. Formerly: METO620.

Air parcel thermodynamics and stability; constituent thermodynamics and chemical kinetics. Cloud and aerosol physics and precipitation processes.

0101	Russell Dickerson TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 25) BPS 1250 ONLINE

AM01	Russell Dickerson	Seats (Total: 1)
	TuTh 2:00pm - 3:15pm	BPS 1250
	Class time/details on ELMs	ONLINE

AOSC633 **Atmospheric Chemistry and Climate**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: CHEM131, CHEM135, or CHEM146. And MATH241; or permission of CMNS-Atmospheric & Oceanic Science department; or permission of CMNS-Chemistry & Biochemistry department. Cross-listed with CHEM633. Credit only granted for: AOSC433, AOSC633, CHEM433, or CHEM633.

The effects of human activity on atmospheric composition, focused on global warming, the carbon cycle, air pollution, and the ozone layer. Fundamentals of atmosphereic chemistry (spectroscopy, kinetics, isotopic analysis, and biogeochemical cycles) are related to the modern understanding of climate change, air quality, and ozone depletion, based on resources such as satellite missions, field campaigns, and scientific assessments published by international agencies. We also examine how society's energy needs could be met, in the future, in a manner with less impact on atmospheric composition than the present heavy reliance on combusion of fossil fuels.

0101	Ross Salawitch	Seats (Total: 5)
	TuTh 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE
	Alternating face-to-face/ online class meeting. Please see instructor for details.	

AOSC652 **Analysis Methods in Atmospheric and Oceanic Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PHYS141 and MATH241; or students who have taken courses with comparable content may contact the department. Recommended: AMSC460, CMSC660, AMSC660, or CMSC460.

A variety of the analysis methods used by atmospheric and oceanic scientists will be applied to observational data sets such as Vostok ice core record, temperature trends, and satellite measurements of ozone,sea ice, etc. in a hands-on, computer laboratory setting. Students will be exposed to Fortran and Python as well as modern file formats such as HDF and netCDF. No prior programming experience required.

0101	Jeffrey Henrikson	Seats (Total: 24)
	Class time/details on ELMs	ONLINE

0201	Jeffrey Henrikson Class time/details on ELMs	Seats (Total: 30) ONLINE
AM01	Jeffrey Henrikson Class time/details on ELMs	Seats (Total: 1) ONLINE
AM02	Jeffrey Henrikson Class time/details on ELMs	Seats (Total: 1) ONLINE

AOSC670 **Physical Oceanography**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of CMNS-Atmospheric & Oceanic Science department; or permission of CMNS-Geology department. Jointly offered w ith AOSC420, GEOL670. Credit only granted for: GEOL670, AOSC670 or AOSC420.

Ocean observations. Water masses, sources of deep water. Mass, heat, and salt transport, geochemical tracers. Western boundary currents, maintenance of the thermocline. Coastal and estuarine processes. Surface waves and tides. Ocean climate.

0101	Jacob Wenegrat MW 3:15pm - 4:30pm	Seats (Total: 11) ONLINE
AM01	Jacob Wenegrat MW 3:15pm - 4:30pm	Seats (Total: 1) ONLINE

AOSC680 **Introduction to Earth System Science**

Credits: 3 Grading Method: Regular, Audit

An introduction to the study of the earth as a system: atmosphere, oceans, land, cryosphere, solid earth, and humans. Cycling of materials and energy in the earth system: the energy cycle, the hydrologic cycle, the carbon cycle, the nitrogen cycle. Climate processes and variability: land-atmosphere, ocean-atmosphere, biosphere-climate, and human interactions, short- and long-term variability in climate.

0101	William Lau TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE
AM01	William Lau TuTh 11:00am - 12:15pm	Seats (Total: 1) ONLINE

AOSC699 **Independent Study in Atmospheric & Oceanic Science**

(Perm req)

Credits: 1-3 Grading Method: Regular

Research or special study in the field of atmospheric and oceanic sciences. Various special topics are given intensive study. The topic of concentration varies, from semester to semester and depends on student and faculty interests.

Contact department for information to register for this course.

AOSC798 **Directed Graduate Research**

Credits: 1-3 Grading Method: Sat-Fail

Contact department for information to register for this course.

AOSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

AOSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ARAB Arabic Fall 2020

ARAB104 **Elementary Modern Standard Arabic I-II**

Credits: 6 Grading Method: Regular, Pass-Fail

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a fluent/native speaker of Arabic.

An intensive course focusing on developing functional proficiency in the standard Arabic language, both written and formal spoken. Begins with script and phonology, and develops into a limited range of situation-based texts and topics that build vocabulary, grammar, general communicative competence and cultural awareness.

Seats will be opened gradually by the registrar's office, to a total of 15 seats per section.

0101	Lutf Alkebsi MWF 10:00am - 11:50am	Seats (Total: 15) ONLINE
0301	Samah Al-salami MWF 12:00pm - 1:50pm	Seats (Total: 15) ONLINE

0401	Ahmed Hanafy MWF 1:00pm - 2:50pm	Seats (Total: 15) ONLINE

ARAB204 **Intermediate Modern Standard Arabic I**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: ARAB105; and must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a fluent/native speaker of Arabic.

Covers topics related to contemporary Arabic society, literature and culture in standard written and formal spoken Arabic. Acquisition of more complex grammatical structures, expanding vocabulary, and reading, to develop a better understanding of the formal aspects of using MSA.

0101	Lutf Alkebsi MWF 12:00pm - 1:50pm	Seats (Total: 15) ONLINE
0201	Ahmed Hanafy MWF 10:00am - 11:50am	Seats (Total: 15) ONLINE

ARAB206 **Egyptian Colloquial Arabic I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARAB205; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Arabic.

Develops communicative skills and cultural knowledge in Egyptian Arabic. Focuses on various social interactions, work and school situations, as well as specifics of pronunciation and grammar of the Egyptian dialect. Designed for students who have completed two years of the regular Arabic sequence classes (104-105 and 204-205) or equivalent.

Prerequisite: ARAB205.

0101	Valerie Anishchenkova TuTh 12:30pm - 1:45pm	Seats (Total: 15) ONLINE

ARAB207 **Egyptian Colloquial Arabic II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARAB206; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a fluent/native speaker of Arabic.

Further develops communicative skills and cultural knowledge in Egyptian Arabic, extending range of contexts and types of social interaction. Focuses on various aspects of Egyptian popular culture.

Contact department for information to register for this course.

ARAB304 **Advanced Modern Standard Arabic I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARAB205; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Arabic. Formerly: ARAB301.

Advanced grammar, reading, writing, speaking in Arabic; study of contemporary Arabic society, politics, and culture.

0101	Samah Al-salami	Seats (Total: 15)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	F 2:00pm - 2:50pm	ONLINE	Lab

ARAB386 **Experiential Learning**

Credits: 3-6

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department.

Pre-professional experience in research, analysis and writing in a work setting. Project proposal approved by faculty and internship sponsor. Junior standing.

Contact department for information to register for this course.

ARAB399 **Independent Study In Arabic**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Research and writing or specific readings on a topic selected by the student and supervised by a faculty member on the Department of Arabic Studies. To be planned during semester preceding registration.

Contact department for information to register for this course.

ARAB399B **Independent Study In Arabic; Moroccan Arabic: Foundation**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Research and writing or specific readings on a topic selected by the student and supervised by a faculty member on the Department of Arabic Studies. To be planned during semester preceding registration.

Restricted to students in the Arabic Flagship Program.

0101	Ahmed Hanafy	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

ARAB401 **Readings in Arabic Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARAB305; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Arabic.

A survey of Modern Arabic literature is given through a range of selected texts. Texts are studied as literature with constant reference to the social, cultural and political contexts in which they were written. Taught in Arabic.

0101	Anny Gaul	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	ONLINE

ARAB499C **Special Topics in Arabic Studies; Food Cultures in the Global Middle East**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

In-depth study of particular aspect of Arabic culture, literature and language. Specific topic to be announced when course is offered.

Food is both the stuff of everyday routine and rich symbolic meaning, from holiday meals to daily staples. Studying food offers new perspectives on modernization, colonialism, and nationalism, and illuminates popular experiences of major historical events. This course introduces students to the history and culture of the modern Middle Eastand North Africa using materials that include film, cookbooks, and food writing alongside scholarly texts. Taught in English.

0101	Anny Gaul	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

ARAB499X **Special Topics in Arabic Studies; Yemen: Land of War and Peace**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

In-depth study of particular aspect of Arabic culture, literature and language. Specific topic to be announced when course is offered.

Prerequisite: ARAB305 and permission of department. A survey of cultural history of Yemen, including various modes of cultural production such as literature, media, film, music, popular art,and material culture. The course also offers the basics of the Yemeni dialect of Arabic. Taught in Arabic.

0101	Samah Al-salami TuTh 9:30am - 10:45am	Seats (Total: 15) ONLINE	

ARAB628A **Special Topics in Arabic Studies; Arabic Audiovisual Discourses**

Credits: 3 Grading Method: Regular, Audit

In-depth study of a particular aspect of Arabic Studies. Topics to be announced when course if offered. Taught in Arabic.

Contact department for information to register for this course.

ARCH Architecture Fall 2020

ARCH170 **Design Thinking and Architecture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU

Examines conceptual, perceptual, behavioral, and technical aspects of the built environment, and methods of analysis, problem-solving, and design implementation.

0101	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ONLINE ONLINE ONLINE	 Discussion
0102	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ONLINE ONLINE ONLINE	 Discussion
0103	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ONLINE ONLINE ONLINE	 Discussion
0104	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ONLINE ONLINE ONLINE	 Discussion

0105	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 19) ONLINE ONLINE ONLINE	 Discussion
0106	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 19) ONLINE ONLINE ONLINE	 Discussion
FC01	Betsy Petrusic TuTh 7:30pm - 8:45pm *Restricted to students in Freshman Connection.*	Seats (Total: 22) ONLINE	

ARCH171 **Design Thinking and Making in Architecture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Restriction: Must be in a major in ARCH-Architecture Program.

Examines iterative design processes and critical thinking skills through active learning and design thinking methodologies to solve problems and apply design as a lens of inquiry and exploration. Students will understand Design Thinking through interactive and experiential learning.

0101	Alex Donahue, Elijah Northen TuTh 11:00am - 12:15pm	Seats (Total: 50) ONLINE
0102	Alex Donahue, Elijah Northen TuTh 12:30pm - 1:45pm	Seats (Total: 50) ONLINE

ARCH201 **Elements and Principles of Architecture**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program.

Survey of fundamental elements and principals of architecture and architectural education. Frames study of architecture as a profession, discipline and critical practice.

0101	Brian Kelly M 11:00am - 11:50am	Seats (Total: 90) ONLINE

ARCH226 **History of World Architecture II**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Post-1500 - History of Architecture survey course - History of Architecture structured to develop critical thinking and visually literacy with regard to the worldwide legacy of design thinking and building innovation in architecture

0101	Juan Burke TuTh 9:30am - 10:45am	Seats (Total: 120) ONLINE

ARCH270 **Design in Practice**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, SCIS

Case studies and hands-on design projects ranging in scale from a product to a building to give students insight into the process by which architects work both individually and collaboratively to put disciplinary knowledge and expertise into practice to shape our built environment.

A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE): http://ter.ps/iamFEARLESS Click here for more information on the Fearless Ideas Courses.

0101	Madlen Simon TuTh 2:00pm - 3:15pm	Seats (Total: 90) ONLINE

ARCH271 **People, Planet, and Profit: Building Sustainable Places**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Cross-listed with RDEV250. Credit only granted for: ARCH271 or RDEV250.

An introduction to the four disciplines represented in the School: architecture and urban design, community planning, historic preservation, and real estate development, that work to create a more sustainable environment for the future to create a more sustainable environment for the future using our interpretation of the quadruple bottom line: socio-cultural, economic, environmental, and design sustainability. Students will be provided with an understanding of the fundamental scholarship and processes of each of these disciplines and examine the intersections between them. Additionally, they will learn by applying the approaches of the four disciplines through a series of field studies.

0101	Wayne Curtis TuTh 3:30pm - 4:45pm	Seats (Total: 85) ONLINE

ARCH300 **Design Media and Representation II**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARCH200; or permission of ARCH-Architecture Program. Restriction: Must be in a major in ARCH-Architecture Program.

Study of architectural representation in physical and digital design media. Examine visual communications and speculative visual studies through applied drawing, modeling and making to explore expanded roles of representation in design and design thinking.

0101	Michael Abrams W 8:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Michael Abrams W 8:00am - 9:50am W 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Michael Abrams W 8:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Michael Abrams W 8:00am - 9:50am W 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0105	Michael Abrams W 8:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	Michael Abrams W 8:00am - 9:50am W 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0107	Michael Abrams W 8:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0108	Michael Abrams W 8:00am - 9:50am W 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

ARCH400 Architecture Design Studio I

(Perm req)

Credits: 6

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program; and permission of ARCH-Architecture Program.

Introduction to architectural design with particular emphasis on conventions and principles of architecture, visual and verbal communication skills, formal analysis, design process, spatial composition, architectural promenade, basic program distribution, and elementary constructional and environmental responses.

Contact department for information to register for this course.

ARCH401 **Architecture Design Studio II**

(Perm req)

Credits: 6

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ARCH400. Restriction: Must be in Architecture (B.S.) program.

Continuation of ARCH 400 with introduction to building typology, urban and contextual issues, design of the vertical surface, and architectural interiors.

0101	Michael Abrams MWF 2:00pm - 6:00pm Class time/details on ELMs	Seats (Total: 70) ARC 0101 ONLINE
0105	Portia Strahan MWF 2:00pm - 6:00pm Class time/details on ELMs	Seats (Total: 15) ARC 0101 ONLINE

ARCH403 **Architecture Design Studio IV**

(Perm req)

Credits: 6

Grading Method: Regular, Pass-Fail, Audit

General Education: FSOC

Prerequisite: Minimum grade of C- in ARCH402. Restriction: Must be in Architecture (B.S.) program.

Investigations into the relationship between the man-made and the natural world including introductory issues of assembly and material value. Design of the site and the building are combined into an integral process delimiting and probing the boundaries of each and exploring their reciprocal relationship. The architect's obligations to the natural and urban contexts are explored in many dimensions including historical, typological, environmental, and physical.

0101	Michael Ezban, Marcus Cross, Brittany Williams, Jana VanderGoot MWF 2:00pm - 6:00pm Class time/details on ELMs	Seats (Total: 54) ARC 0101 ONLINE

ARCH404 **Graduate Architecture Design Studio I**

(Perm req)

Credits: 6

Grading Method: Regular, Audit

Recommended: For 3 1/2 year graduate students only. Restriction: Must be in Architecture (Master's) program.

Introduction to architectural design with particular emphasis on conventions and principles of architecture , visual and verbal communication skills, formal analysis, design process, spatial composition, architectural promenade, basic program distribution, and elementary constructional and environmental responses. Offered fall only.

0101	Lindsey May	Seats (Total: 12)
	MWF 2:00pm - 6:00pm Class time/details on ELMs	Location: TBA ONLINE

ARCH406 **Graduate Architecture Design Studio III**

(Perm req)

Credits: 6

Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in ARCH405. Restriction: Must be in Architecture (Master's) program.

Investigations into the relationship between the man-made and the natural world including introductory issues of assembly and material value. Design of the site and the building are combined into an integral process delimiting and probing the boundaries of each and exploring their reciprocal relationship. The architect's obligations to the natural and urban contexts are explored in many dimensions including historical, typological, environmental, and physical.

0101	James Tilghman	Seats (Total: 16)
	MWF 2:00pm - 6:00pm Class time/details on ELMs	ARC 0101 ONLINE

ARCH419 **Independent Studies in Architectural Technology**

(Perm req)

Credits: 1-4

Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Contact department for information to register for this course.

ARCH426 **History of Architecture II**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of ARCH-Architecture Program. Credit only granted for: ARCH226 or ARCH426. Additional information: Graduate architecture history course requires additional recitation section and additional coursework tied to survey lectures.

Post-1500 - History of Architecture survey course - History of Architecture structured to develop critical thinking and visually literacy with regard to the worldwide legacy of design thinking and building innovation in architecture. Structured to nurture critical thinking and visually literacy with regard to the worldwide legacy of architecture. The work in the course will involve the evaluation of sources and arguments in reading architectural history. Architecture will be framed relative to ways of thinking, religious beliefs, cultural heritage, and cultural values.

Offered fall only.

0101	Juan Burke	Seats (Total: 120)
	TuTh 9:30am - 10:45am	ONLINE

ARCH427 **Theories of Architecture**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARCH426; or permission of ARCH-Architecture Program. Restriction: Must be in Architecture (B.S.) program.

Survey of architectural theories - theories of architectural design, representation and urban design from antiquity to the present day.

0101	Christian Calleri	Seats (Total: 15)
	TuTh 7:00pm - 8:15pm	ONLINE

ARCH428E **Selected Topics in Architectural History; Global Renaissance**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architectural History

Restriction: permission of department. The course 'Global Renaissance' explores the architecture and urban cultures that flourished under the wide-reaching concept of the Renaissance, during the period ranging from 1450 to 1700. The Renaissance is a term that we usually associate to northern Italy, where it originated. However, the phenomenon of the Renaissance coincided with an age of global exploration, commerce, trade, and colonialism, allof which expanded the ideas of the Renaissance to every corner of Europe, the Mediterranean, the New World, and beyond. During the course we will workwith UMD s MITH (Maryland Institute for Technology in the Humanities), in order to create a digital humanities platform (a web page) in which we will showcase the work you will produce throughout the course. The main characteristicof the digital humanities is to employ technological tools to present humanities subjects under new light. In this case, the work will take the form of 3-D architectural models, use of GIS tools, image editing, or other digital-technological tools in order to produce a public pedagogical resource on the subject of the Global Renaissance.

0101	Juan Burke	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	ONLINE

ARCH428K **Selected Topics in Architectural History; Cities of the Early Modern Mediterranean**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architectural History

Prerequisite: ARCH225 and ARCH226; or equivalent. In this course, we use the Mediterranean Sea as a framework for exploring architecture and cities in the early modern period (1450-1750). We look at key cities Rome, Istanbul, Aleppo, Venice, Granada, Algiers with the aim of discovering parallels and contrasts between urban form, architecture, and society under Christian and Islamic rule. Themes include: religious complexes as urban design; social life and public space; trade and commerce; building cultures, technologies, and infrastructure; social classes and religious groups; and the impact of war on urban form.

0101	Michele Lamprakos	Seats (Total: 20)
	Th 2:00pm - 4:45pm	ONLINE

ARCH428N **Selected Topics in Architectural History; Medieval Architecture**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architectural History

Prerequisite: ARCH225 and ARCH226. Jointly offered with ARCH628N. Credit only granted for: ARCH428N or ARCH628N. Medieval Europe and the Mediterranean produced a unique building culture in which design was flexible and deeply grounded in the act of construction. In this class, we will trace the diversity of Byzantine, Islamic, Romanesque and Gothic architecture through select case studies.Students will learn to unravel buildings in terms of phases of construction, relate each phase to a different social or political context, and describe the structural technologies that medieval masons rightly flaunted.

0101	Joseph Williams	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	ONLINE

ARCH428P **Selected Topics in Architectural History; Architecture of the Crusades**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architectural History

Architecture is not innocent or docile. When the Christian leaders of medieval Europe launched a series of crusades against Muslim cities of the "Holy Land", buildings colonized territory, enforced the hegemony of certain identity groups over others, reconfigured economic structures and class hierarchies, and became theaters for violence. Using the architecture of the Crusades as a test case, this course will introduce you to diverse theories for the social interpretation of space, a skill that will help you practice socially responsible design in a present world torn apart by inequity. For your final paper, you will develop your own method of architectural analysis and interpretation based on such theories.

0101	Joseph Williams	Seats (Total: 20)
	Tu 7:00pm - 9:40pm	ONLINE

ARCH428T **Selected Topics in Architectural History; American Building Typologies**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architectural History

Examines key public, institutional, commercial, and residential building types since the founding of the nation to 1980. Such an approach to American architecture facilitates in-depth studies of like-purposed buildings, focusing on function and design through time. Categories could include state capitals, jails and prisons, places of worship, libraries, art academies and cultural institutions, railroad stations, banks, stores and so on. Students gain additional persepctive by examining the buildings' historical, cultural, and social contexts.

0101	Caroline Hickman	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

ARCH429 **Independent Studies in Architectural History**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Prerequisite: permission of department.

Contact department for information to register for this course.

ARCH430 **Measuring Sustainability in Architecture**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ARCH430 or ARCH418M. Formerly: ARCH418M.

Studies metrics of sustainability as included in rating standards, including LEED. All students will take the LEED GA test.

0101	Ralph Bennett	Seats (Total: 90)
	TuTh 5:00pm - 6:15pm	ONLINE

ARCH443 **Visual Communication For Architects**

(Perm req)

Credits: 3 Grading Method: Regular

Corequisite: ARCH400. Restriction: Must be in Architecture (Master's) program; and must be in the 3.5 year M. ARCH program.

Investigation of the relationship between drawing from life and architectural drawing, the conventions of architectural drawing and the role of architectural drawing as a means to develop, communicate, and generate architectural ideas.

0101	Brittany Williams	Seats (Total: 10)
	M 10:00am - 12:40pm	ONLINE

ARCH448M **Selected Topics in Visual Studies in Architecture; Applied Model Making**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Visual Studies in Architecture

0101	David Atwater	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	ARC 0101

ARCH449 **Independent Studies in Visual Studies in Architecture**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Prerequisite: permission of department.

Contact department for information to register for this course.

ARCH459 **Independent Studies in Urban Design**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Contact department for information to register for this course.

ARCH460 **Site Analysis and Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARCH-Architecture Program.

Principles and methods of site analysis; the influence of natural and man-made site factors on site design and architectural form.

0101	Michael Ezban	Seats (Total: 60)
	F 9:30am - 12:00pm	ONLINE
	Principles and methods of site analysis; the influence of natural and man-made site factors on site design and architectural form. This is a graduate level course that is required for all students in the Master's of Architecture program.	

ARCH462 **Methods & Materials of Building Construction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS121 or equivalent; and MATH120 or MATH140 or equivalent; or permission of the ARCH-Architecture Program. Restriction: Must be in a major in undergraduate or graduate ARCH program or Construction Project Management Minor. Credit only granted for: ARCH410 or ARCH462.

Building Construction methods and materials are examined through case studies to explore the means and techniques applied to the material execution of buildings and BIM. Focus on an understanding of the organization of the design and construction process and awareness of building and zoning codes, material systems and types.

0101	Ming Hu	Seats (Total: 105)
	TuTh 12:30pm - 1:45pm	ONLINE

ARCH464 **Architectural Structures I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARCH462, ARCH463, and PHYS121; and MATH120 or MATH140, or equivalent; or permission of the ARCH-Architecture Program. Corequisite: ARCH401 or ARCH406. Restriction: Must be in either BS in Architecture or M.Architecture Program. Credit only granted for: ARCH411 or ARCH464.

This course covers the basic principles of architectural structures, including the influence of geometric, sectional, and material properties related to flexure and shear in beam and framed systems; vector mechanics with application to analysis of trusses, catenaries, and arches; diagrammatic analysis of beams for bending moment, shear, and deflection as well as the study of structural framing systems for vertical and lateral loads.

0101	Ming Hu	Seats (Total: 70)
	TuTh 9:30am - 10:45am	ONLINE

ARCH466 **Environmental Systems in Architecture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARCH462 and ARCH463. Corequisite: ARCH403 or ARCH406. Restriction: Must be in either BS in Architecture or M. Architecture Program. Credit only granted for: ARCH413 or ARCH466.

Environmental systems in architecture presents the theory, quantification, and architectural design implications for heating ventilating and air conditioning, water and waste, fire protection, electricity, illumination, acoustics, and vertical transportation.

0101	Carl Bovill	Seats (Total: 90)
	TuTh 11:00am - 12:15pm	ONLINE

ARCH467 **Integrated Project Delivery**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program; or must be in Construction Project Management Minor.

Integrated Project Delivery is examined from design to implementation through an exploration of building construction, architectural design and construction management perspectives.

0101	Omar Hakeem Th 7:00pm - 9:40pm	Seats (Total: 10) ONLINE	

ARCH470 **Computer Applications in Architecture**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARCH400; or permission of ARCH-Architecture Program. Restriction: Must be in Architecture (B.S.) program.

Introduction to computer utilization, with emphasis on architectural applications.

0101	Andrew Lindberg Tu 7:00pm - 9:30pm Th 7:00pm - 8:15pm	Seats (Total: 18) ONLINE ONLINE	 Lab

ARCH472 **Building Information Modeling Communication and Collaboration**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program; or must be in the Construction Project Management Minor. Credit only granted for: ARCH678I or ARCH472. Formerly: ARCH678I.

Building Information Modeling is explored as pertains to collaboration and communication in the design and construction of buildings and building systems. Practical and empirical learning using BIM software and case studies of real world projects and construction scenarios.

0101	Douglas Crawford WF 9:30am - 10:45am	Seats (Total: 18) ONLINE
0102	Douglas Crawford WF 11:00am - 12:15pm	Seats (Total: 18) ONLINE

ARCH478C **Selected Topics in Architecture; Architecture and Cinema: Place and Film**

Credits: 3 Grading Method: Regular, Audit

Selected Topics in Architecture

This course explores the relationship between architecture, place and film media. Students will examine the portrayal and use of architecture and place within the development of both early and contemporary cinema, across genres and cultures.

0101	Peter Noonan Th 7:00pm - 9:40pm	Seats (Total: 4) ONLINE

ARCH478E **Selected Topics in Architecture; Creating the Cities We Want**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architecture

Everything in the way buildings and cities are designed, constructed, operated, and renewed must be retooled to decarbonize the built environment. Climate action presents the next generation of professionals who shape the built environment an unprecedented opportunity to create healthy, equitable, regenerative, and resilient cities. Creating the Cities We Want explores the essential principles and practices of architecture's relevance revolution.

0101	Carl Elefante Tu 6:30pm - 9:30pm	Seats (Total: 25) ONLINE

ARCH478I **Selected Topics in Architecture; Whose Truth? PlaceMaking, PlaceKeeping, & PlaceSharing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architecture

The Black Lives Matter Movement, the toppling of confederate statues and the current administration's use of Mt. Rushmore and the Church of St. John's in DC to affirm their narrative underscore how timely this seminar is. This course will delve into place-based literature, design, art, imagery and citizen action to deepen our understanding of the narratives and counter-narratives inscribed in situ through event, artifacts, spatial-relationships, and story. Together we will explore how as citizens and shapers of the built environment knowingly and unknowingly elevate power and injustice and negotiate often-conflicting narratives of ownership, event, culture and place. Seminar research and artifacts will contribute material to the Kibel Exhibit, expanding upon existing content and structured around individual students' disciplines, questions, talents, and areas of interest.

0101	Ronit Eisenbach	Seats (Total: 15)
	Th 2:00pm - 4:45pm	ONLINE

ARCH478T **Selected Topics in Architecture; Ecological Design Thinking**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architecture

The etymology and definition of ecology contain aspects of house, of relationships, of the living environment and of systems. We will engage with all of these concepts in this course. Design thinking is a form of systems thinking, in which many variables and scales, requirements and ideas interact to form a coherent whole. We will ask WHY a lot. We will ask WHY a lot. We will discover ways to confront difficult truths, negotiate contradictions, and still be an effective advocate and change agent.

0101	Julie Gabrielli	Seats (Total: 15)
	W 9:00am - 11:40am	ONLINE

ARCH478U **Selected Topics in Architecture; The Black Experience & The American Built Enviornment**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architecture

This course will explore the historical and contemporary relationships between the American Black Population and the design, planning, land policy and use of American land.

0101	Marques King	Seats (Total: 20)
	W 7:00pm - 9:50pm	ONLINE

ARCH479 **Independent Studies in Architecture**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Prerequisite: permission of department.

Contact department for information to register for this course.

ARCH489 **Independent Studies in Architectural Preservation**

(Perm req)

Credits: 1-4

Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Prerequisite: permission of department.

Contact department for information to register for this course.

ARCH600 **Integrated Design Studio V**

(Perm req)

Credits: 6

Grading Method: Regular, Audit

Corequisite: ARCH611. Restriction: Permission of ARCH-Architecture Program.

Integrated and comprehensive building and site design. Course content bridges the gap between design and technology, between practice and education, in a studio setting. Explorations include the integration of conceptual and technical aspects of architectural form and assembly, highlighting the ways in which multiple layers of a building design are developed, coordinated and resolved.

0101	Amy Gardner, Julie Gabrielli MWF 2:00pm - 6:00pm Class time/details on ELMs	Seats (Total: 12) ARC 0101 ONLINE

ARCH611 **Advanced Architecture Technology Seminar**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Corequisite: ARCH600. Restriction: Permission of ARCH-Architecture Program.

Technology in design of buildings. Application of technological issues in building design; integration of technology in architecture; technology as a form determinant in architecture; other conceptual and philosophical issues related to the application of technology in the design, construction, and use of buildings.

Offered fall only.

0101	Carl Bovill, Ming Hu TuTh 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 25) Location: TBA ONLINE

ARCH628E **Selected Topics in Architectural History; Global Renaissance**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Graduate Selected Topics in Architectural History

The course 'Global Renaissance' explores the architecture and urban cultures that flourished under the wide-reaching concept of the Renaissance, during the period ranging from 1450 to 1700. The Renaissance is a term that we usually associate to northern Italy, where it originated. However, the phenomenon of the Renaissance coincided with an age of global exploration, commerce, trade, and colonialism, allof which expanded the ideas of the Renaissance to every corner of Europe, the Mediterranean, the New World, and beyond. During the course we will workwith UMD s MITH (Maryland Institute for Technology in the Humanities), in order to create a digital humanities platform (a web page) in which we will showcase the work you will produce throughout the course. The main characteristicof the digital humanities is to employ technological tools to present humanities subjects under new light. In this case, the work will take the form of 3-D architectural models, use of GIS tools, image editing, or other digital-technological tools in order to produce a public pedagogical resource on the subject of the Global Renaissance.

0101	Juan Burke	Seats (Total: 4)
	TuTh 2:00pm - 3:15pm	ONLINE

ARCH628K **Selected Topics in Architectural History; Cities of the Early Modern Mediterranean**

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architectural History

Prerequisite: ARCH225 and ARCH226; or equivalent. In this course, we use the Mediterranean Sea as a framework for exploring architecture and cities in the early modern period (1450-1750). We look at key cities Rome, Istanbul, Aleppo, Venice, Granada, Algiers with the aim of discovering parallels and contrasts between urban form, architecture, and society under Christian and Islamic rule. Themes include: religious complexes as urban design; social life and public space; trade and commerce; building cultures, technologies, and infrastructure; social classes and religious groups; and the impact of war on urban form.

0101	Michele Lamprakos	Seats (Total: 10)
	Th 2:00pm - 4:45pm	ONLINE

ARCH628N **Selected Topics in Architectural History; Medieval Architecture**

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architectural History

Jointly offered with ARCH428N. Credit only granted for: ARCH428N or ARCH628N. Medieval Europe and the Mediterranean produced a unique building culture in which design was flexible and deeply grounded in the act of construction. In this class, we will trace the diversity of Byzantine, Islamic, Romanesque and Gothic architecture through select case studies.Students will learn to unravel buildings in terms of phases of construction, relate each phase to a different social or political context, and describe the structural technologies that medieval masons rightly flaunted.

0101	Joseph Williams	Seats (Total: 15)
	TuTh 3:30pm - 4:45pm	ONLINE

ARCH628P **Selected Topics in Architectural History; Architecture of the Crusades**

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architectural History

Architecture is not innocent or docile. When the Christian leaders of medieval Europe launched a series of crusades against Muslim cities of the "Holy Land", buildings colonized territory, enforced the hegemony of certain identity groups over others, reconfigured economic structures and class hierarchies, and became theaters for violence. Using the architecture of the Crusades as a test case, this course will introduce you to diverse theories for the social interpretation of space, a skill that will help you practice socially responsible design in a present world torn apart by inequity. For your final paper, you will develop your own method of architectural analysis and interpretation based on such theories.

0101	Joseph Williams	Seats (Total: 5)
	Tu 7:00pm - 9:40pm	ONLINE

ARCH628T **Selected Topics in Architectural History; American Building Typologies**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architectural History

Examines key public, institutional, commercial, and residential building types since the founding of the nation to 1980. Such an approach to American architecture facilitates in-depth studies of like-purposed buildings, focusing on function and design through time. Categories could include state capitals, jails and prisons, places of worship, libraries, art academies and cultural institutions, railroad stations, banks, stores and so on. Students gain additional perspective by examining the buildings' historical, cultural, and social contexts.

0101	Caroline Hickman	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ONLINE

ARCH629 **Graduate Independent Studies in Architectural History**

(Perm req)

Credits: 1-4

Grading Method: Regular, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

0701	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
0801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
0901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 2)

ARCH678C **Advanced Selected Topics in Architecture; Architecture and Cinema: Place and Film**

Credits: 3

Grading Method: Regular, Audit

Graduate Selected Topics in Architecture.

This course explores the relationship between architecture, place and film media. Students will examine the portrayal and use of architecture and place within the development of both early and contemporary cinema, across genres and cultures.

0101	Peter Noonan Th 7:00pm - 9:40pm	Seats (Total: 11) ONLINE

ARCH678E **Advanced Selected Topics in Architecture; Creating the Cities We Want**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

Graduate Selected Topics in Architecture.

Everything in the way buildings and cities are designed, constructed, operated, and renewed must be retooled to decarbonize the built environment. Climate action presents the next generation of professionals who shape the built environment an unprecedented opportunity to create healthy, equitable, regenerative, and resilient cities. Creating the Cities We Want explores the essential principles and practices of architecture's relevance revolution.

0101	Carl Elefante Tu 6:30pm - 9:30pm	Seats (Total: 5) ONLINE

ARCH678I **Advanced Selected Topics in Architecture; Whose Truth? PlaceMaking, PlaceKeeping, & PlaceSharing**

(Perm req)

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

Graduate Selected Topics in Architecture.

The Black Lives Matter Movement, the toppling of confederate statues and the current administration's use of Mt. Rushmore and the Church of St. John's in DC to affirm their narrative underscore how timely this seminar is. This course will delve into place-based literature, design, art, imagery and citizen action to deepen our understanding of the narratives and counter-narratives inscribed in situ through event, artifacts, spatial-relationships, and story. Together we will explore how as citizens and shapers of the built environment knowingly and unknowingly elevate power and injustice and negotiate often-conflicting narratives of ownership, event, culture and place. Seminar research and artifacts will contribute material to the Kibel Exhibit, expanding upon existing content and structured around individual students' disciplines, questions, talents, and areas of interest.

0101	Ronit Eisenbach	Seats (Total: 1)
	Th 2:00pm - 4:45pm	ONLINE

ARCH678L **Advanced Selected Topics in Architecture; Destruction, Memory, Renewal**

Credits: 3

Grading Method: Regular, Audit

Graduate Selected Topics in Architecture.

This course explores destruction of historic monuments and sites, and how they are remembered and renewed as societies struggle to recover and rebuild. We begin by looking at recent destruction and defense of heritage in the Middle East. We then explore theories of the monument and memory, and their significance in a globalized world. We test and expand these theories through case studies from different historical moments. Examples include Byzantine and Protestant iconoclasm; exorcism/erasure of prior religions and regimes (conversion of religious buildings; rituals of damnatio memoriae); uses and meanings of spolia; theft, restitution, and repatriation of antiquities. Throughout the course, we focus on people: how they experience war and displacement, and how memory and forgetting help them rebuild.

0101	Michele Lamprakos	Seats (Total: 15)
	Tu 7:00pm - 9:40pm	ONLINE

ARCH678T **Advanced Selected Topics in Architecture; Ecological Design Thinking**

Credits: 3

Grading Method: Regular, Audit

Graduate Selected Topics in Architecture.

The etymology and definition of ecology contain aspects of house, of relationships, of the living environment and of systems. We will engage with all of these concepts in this course. Design thinking is a form of systems thinking, in which many variables and scales, requirements and ideas interact to form a coherent whole. We will ask WHY a lot. We will ask WHY a lot. We will discover ways to confront difficult truths, negotiate contradictions, and still be an effective advocate and change agent.

0101	Julie Gabrielli	Seats (Total: 15)
	W 9:00am - 11:40am	ONLINE

ARCH678U **Advanced Selected Topics in Architecture; The Black Experience & The American Built Enviornment**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Graduate Selected Topics in Architecture.

This course will explore the historical and contemporary relationships between the American Black Population and the design, planning, land policy and use of American land.

0101	Marques King	Seats (Total: 2)
	W 7:00pm - 9:50pm	ONLINE

ARCH679 **Advanced Independent Studies in Architecture; Independent Study in Architecture**

Credits: 1-4 Grading Method: Regular, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Contact department for information to register for this course.

ARCH700 **Urban Design Studio VII**

(Perm req)

Credits: 6 Grading Method: Regular, Audit

Restriction: Permission of ARCH-Architecture Program.

Studio problems and theories concentrating on urbanism and urban design techniques. Issues and sites range from high density urban in-fill to suburban and greenfield development in American and other contexts. Studio theories explore such topics as Contextualism, Neo-Traditional design, Transit-Oriented Development, density, sustainable development building typology, and street design.

0101	Matthew Bell TuTh 1:00pm - 6:00pm F 4:00pm - 6:00pm Class time/details on ELMs	Seats (Total: 19) ARC 0101 ARC 0101 ONLINE

ARCH770 **Professional Practice of Architecture**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARCH-Architecture Program.

Project management, organizational, legal, economic and ethical aspects of architecture.

0101	Andrew Pressman M 11:00am - 1:50pm	Seats (Total: 30) ONLINE

ARCH797 **Thesis Proseminar**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ARCH601.

Directed research and preparation of thesis program.

0101	James Tilghman TuTh 9:00am - 10:15am Class time/details on ELMs	Seats (Total: 20) TWS 1310 ONLINE

ARCH798 **Thesis in Architecture**

(Perm req)

Credits: 3 Grading Method: Regular

Complements the research of ARCH 799, with presentation of the design research to student's thesis committee.

Contact department for information to register for this course.

ARCH799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Development of master's thesis.

Restricted to ARCH majors only.

Contact department for information to register for this course.

AREC Agricultural and Resource Economics Fall 2020

AREC200 **The Chesapeake Bay Ecosystem: Intersection of Science, Economics, and Policy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: LS | General Education: DSNS, DSSP, SCIS

The Chesapeake Bay is one of the most studied and monitored ecosystems in the world. To develop effective policies to restore this system to a healthier status requires integrating what we know about the biological and physical properties of the system with our understanding of the human dimension. Issues such as achieving nutrient reduction goals, restoring healthy blue crab and oyster fisheries in the bay will be used to demonstrate how economics interacts with science to guide policies that can be effective in achieving Bay restoration goals.

0101	Rebecca Epanchin-Niell, Sara Lombardi MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 35) ONLINE ONLINE	 Discussion
0102	Sara Lombardi, Rebecca Epanchin-Niell MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 35) ONLINE ONLINE	 Discussion
0103	Sara Lombardi, Rebecca Epanchin-Niell MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 35) ONLINE ONLINE	 Discussion
0104	Rebecca Epanchin-Niell, Sara Lombardi MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 35) ONLINE ONLINE	 Discussion

AREC241 **Environment, Economics and Policy**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Credit only granted for: AREC240 or AREC241.

Studies the relationship between the economy, environment and policy. Causes of modern environmental problems and policies to address them. Importance of production, consumption, externalities, property rights and public goods in environmental issues. Technological and incentive-based solutions to environmental problems.

0101	Lars Olson	Seats (Total: 36)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	W 10:00am - 10:50am	ONLINE	Discussion
0102	Lars Olson	Seats (Total: 36)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	W 11:00am - 11:50am	ONLINE	Discussion

AREC250 **Elements of Agricultural and Resource Economics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Credit only granted for: ECON200, AREC240 or AREC250.

An introduction to economic principles of production, marketing, agricultural prices and incomes, farm labor, credit, agricultural policies, and government programs.

0101	Mary Zaki	Seats (Total: 80)	
	TuTh 11:00am - 12:15pm	ONLINE	

AREC306 **Farm Management and Sustainable Food Production**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

The organization and operation of farm businesses are explored through principles of management, financial analysis, production economics, marketing, and business planning. These farm management principles are presented in the context of a sustainable food production system.

0101	Dale Johnson	Seats (Total: 50)	
	MW 3:30pm - 4:45pm	ONLINE	

AREC326 **Intermediate Applied Microeconomics**

Credits: 3 | Grading Method: Regular

Prerequisite: ECON200, AREC250, or AREC240; and ECON201. And MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220. Credit only granted for: ECON306, ECON326, AREC489M, or AREC326. Formerly: AREC489M.

Deepens and broadens your ability to apply rigorous economic analysis skills to a broad range of problems.

0101	Neslihan Uler	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	ONLINE

AREC365 **World Hunger, Population, and Food Supplies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DVUP

An introduction to the problem of world hunger and possible solutions to it. World demand, supply, and distribution of food. Alternatives for leveling off world food demand, increasing the supply of food, and improving its distribution. Environmental limitations to increasing world food production.

0101	Kenneth Leonard	Seats (Total: 360)
	MWF 1:00pm - 1:50pm	ONLINE

AREC380 **Data Science for Environmental and Resource Economics**

Credits: 3 Grading Method: Regular

Prerequisite: AREC240, AREC241, AREC250, or ECON200.

An introduction to principles of data science using modern, open source software tools with applications to important problems in environmental, energy and resource economics. Topics include data wrangling, exploratory data analysis and visualization, modeling, forecasting, practices for reproducible research, and communication of results.

0101	James Archsmith	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	ONLINE

AREC386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of AGNR-Agricultural & Resource Economics department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

AREC388 **Honors Thesis Research**

(Perm req)

Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

Contact department for information to register for this course.

AREC399 **Special Problems**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Concentrated reading and study in some phase of a problem in agricultural and/or natural resource economics.

Contact department for information to register for this course.

AREC422 **Econometric Analysis in Agricultural and Environmental Economics**

Credits: 3 Grading Method: Regular

Prerequisite: 1 course from (AREC326 or ECON326); and 1 course from (ECON230, ECON321, or BMGT230). Credit only granted for: ECON422, ECON424, or AREC422.

This course offers a hands-on introduction to econometrics. Students will explore the linear regression model from the ground up by analyzing real-world datasets and learning how to distinguish causation from correlation. They will gain practical experience using econometrics to address important questions in agricultural economics and environmental economics.

0101	Louis Preonas	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	ONLINE

AREC426 **Economic Methods and Food Consumption Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AREC326; or ECON326. Credit only granted for: AREC489O or AREC426. Formerly: AREC489O.

An overview of major econometric tools used by policy makers, economists and social scientists to analyze the effects of food consumption policy. Major food assistance programs in the United States such as SNAP, the School Lunch Program and the School Breakfast Program will be discussed.

0101	Mary Zaki	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ONLINE

AREC427 **Commodity Pricing and Markets**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON326 or AREC326; or students who have taken courses with comparable content may contact the department.

Economic theory as applied to the marketing of agricultural commodities. How commodity prices vary with current demand and production, and how prices are linked over time, across space, and across grades. The role played by contractual arrangements, cooperative marketing, vertical integration, and governmental policies in commodity marketing strategies.

0101	James MacDonald	Seats (Total: 35)
	MWF 1:00pm - 1:50pm	ONLINE

AREC430 **Introduction to Agricultural and Resource Law**

Credits: 3 Grading Method: Regular

Prerequisite: ECON326 or AREC326. Credit only granted for: AREC430 or AREC489K. Formerly: AREC489K.

Survey of law with emphasis on problems and applications related to agricultural and natural resource economics. The course emphasizes strategies for managing legal risk arising from ownership, management, and use of agricultural resources. Students will get practical information to utilize in personal or professional settings. Contract law, constitutional law, tort law, property law, real estate transactions, business organization, estate planning, and debtor.

0101	Paul Goeringer	Seats (Total: 80)
	MWF 10:00am - 10:50am	ONLINE

AREC453 **Natural Resources and Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AREC326, ECON306, or ECON326; and (BMGT230 or ECON230). Restriction: Must be in one of the following programs (Agricultural and Resource Economics; Agricultural and Resource Economics: Agribusiness; Agricultural and Resource Economics: Environmental and Resource Economics; Economics Bachelor of Arts; Environmental Science & Policy-Env Economics). Cross-listed with ECON453. Credit only granted for: AREC453 or ECON453.

Rational use and reuse of natural resources. Theory, methodology, and policies concerned with the allocation of natural resources among alternative uses. Optimum state of conservation, market failure, safe minimum standard, and cost-benefit analysis.

0101	Erik Lichtenberg	Seats (Total: 80)
	TuTh 2:00pm - 3:15pm	ONLINE

AREC455 **Economics of Land Use**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (AREC326, ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, ECON321, BMGT230). Cross-listed with: ECON485. Credit only granted for: AREC455 or ECON485.

Fundamentals of location theory. Microeconomics of land use decisions, including determination of rent and hedonic pricing models. Impacts of government decisions on land use, including regulation (e.g., zoning), incentives (transferable development rights), provision of public services, and infrastructure investments. Impacts of land use on environmental quality, including issues relating to sprawl, agricultural land preservation, and other topics of special interest.

0101	David Newburn	Seats (Total: 80)	
	TuTh 3:30pm - 4:45pm	ONLINE	

AREC620 **Optimization in Agricultural and Resource Economics**

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: Must have completed Multivariate calculus and matrix or linear algebra.

Mathematical theory of static and dynamic optimization as applied to the economics of agriculture, natural resources and the environment. Topics include necessary and sufficient conditions for constrained optimization, convexity and concavity, duality and the envelope theorem, comparative statics, fixed point theorems, optimal control theory and dynamic programming.

0101	Lars Olson	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

AREC623 **Applied Econometrics I**

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: Introductory statistics or econometrics, linear algebra, and differential/calculus; or permission of instructor. Additional information: Intended for first-year Ph.D. students from AREC, BUFN, ECON, EDMS, EDUC, PLCY and URSP departments with a background in introductory statistics or econometrics.

A modern introduction to empirical strategies in applied microeconomic research in public policy, development economics, labor economics, education, marketing and corporate finance. Emphasis on causal reasoning and design-driven identification in the social sciences. Concepts and applications will focus on addressing economically meaningful causal questions. Basic theoretical and mathematical aspects of probability and statistics will be developed to assess the significance of the relationship among economic variables. Topics include: the approximation of the conditional expectation function through a linear predictor (Ordinary Least Squares), the effects of omitted variables and the usefulness of variables that resemble the outcome of a randomized experiment (Instrumental Variables), as well as extensions to high-dimensional big-data counterparts. Fundamental concepts in sampling theory, statistical inference (with small and large samples) and hypothesis testing will be studied and applied to real data using Stata, a general-purpose statistical software.

0101	Erich Battistin	Seats (Total: 27)	
	TuTh 11:30am - 2:00pm	ONLINE	
	F 11:00am - 1:00pm	ONLINE	Discussion

AREC699 **Special Problems in Agricultural and Resource Economics**

(Perm req)

Credits: 1-2 Grading Method: Regular, Audit

Intensive study and analysis of specific problems in the field of agricultural and resource economics, providing in-depth information in areas of special interest to the student.

Contact department for information to register for this course.

AREC785 **Advanced Economics of Natural Resources**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of AGNR-Agricultural & Resource Economics department; or (ECON603 and AREC623). Cross-listed with ECON785. Credit only granted for: AREC785 or ECON785.

The use of exhaustible and renewable natural resources from normative and positive points of view. Analysis of dynamic resource problems emphasizing energy, mineral, groundwater, forestry, and fishery resources; optimal, equilibrium, and intergenerational models of resource allocation.

0101	James Archsmith	Seats (Total: 28)
	TuTh 12:30pm - 1:45pm	ONLINE

AREC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

AREC845 **Environment and Development Economics**

Credits: 3 Grading Method: Regular, Audit

Considers neoclassical and endogenous growth models; international trade theory; the role of property right institutions and factor markets; the environmental impact of trade liberalization in developing countries and the environmental effects of increasing international capital mobility; empirical studies relating the environment to growth and globalization; and policy analyses.

0101	Louis Preonas	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

AREC847 **Networks, Social Learning and Technology Adoption**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: AREC624, AREC623, and ECON603; and students who have taken courses with comparable content may contact the department.

This class will focus on networks, learning from others, and peer effects and the role ofeach in human capital accumulation, technology adoption and behavior. The material isfocused on applications of education, health agriculture and entrepreneurship in developingcountries, but will draw heavily from literatures on these effects in developed countries aswell. The class will cover the theory of networks and learning but its primary focus will beon the empirical difficulty of identifying these effects and establishing causality.

0101	Kenneth Leonard	Seats (Total: 25)
	MW 10:00am - 11:15am	ONLINE

AREC891 **Introduction to Prospectus Development**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: Completion of the first year of graduate study in AREC. Credit only granted for: AREC 869K or AREC 891. Formerly: AREC869K.

Critical evaluation of research, prospectus topic exploration including literature review, data identification, model development, and related presentations. Required of all second-year Ph.D. students.

0101	Erik Lichtenberg	Seats (Total: 10)
	TuTh 9:30am - 10:45am	ONLINE

AREC892 **Dissertation Prospectus Development**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Completion of two years of the AREC Ph.D. program. Credit only granted for: AREC 869P or AREC 892. Formerly: AREC869P.

Presentations of proposed dissertation research including literature review, model development, data identification, and written prospectus development. Required of all third-year Ph.D. students.

0101	Erik Lichtenberg	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ONLINE

AREC898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

AREC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ARHU Arts and Humanities Fall 2020

ARHU158Q **Explorations in Arts and Humanities; The Power of Youth**

Credits: 3 Grading Method: Regular General Education: DSSP

A first-year innovation and research experience. It introduces multiple disciplinary perspectives within a given theme to understand human beings, cultures and societies. Students will learn about key questions, concepts, methods, and practices within ARHU and will engage in original humanistic research while working with campus and college tools and resources.

Restricted to first semester first year students in the College of Arts and Humanities. Twenty-something influencers such as Kylie Jenner and Shawn Mendes use social media to reach their millions of followers and to help shape what they think about, talk about, and purchase. Parkland, Florida students Emma Gonzalez and David Hogg show how young people can affect social change by advocating for stricter gun control laws on national media outlets. Starting with these examples and drawing from literature, politics, and gender and sexuality studies, we will analyze youth and its power in our culture.

0101	Robert Crane	Seats (Total: 25)
	MW 3:30pm - 4:45pm	ONLINE

ARHU158T **Explorations in Arts and Humanities; Using Science Fiction to Interrogate Diversity, Identity, and Power**

Credits: 3 Grading Method: Regular General Education: DSSP

A first-year innovation and research experience. It introduces multiple disciplinary perspectives within a given theme to understand human beings, cultures and societies. Students will learn about key questions, concepts, methods, and practices within ARHU and will engage in original humanistic research while working with campus and college tools and resources.

Restricted to first semester first year students in the College of Arts and Humanities. How do we engage with, embrace, or push back against various science fiction visions of the future? And what does that tell us about ourselves and our collective futures? Students will examine how science fiction texts-- including novels, short stories, movies, and television-- and science fiction scholarship-- intersect with writers and readers (including women, LGBTQ people, people of color, and indigenous populations) and with current political movements, trends, and "identity politics."

0101	Rebecca Holden	Seats (Total: 25)
	TuTh 9:30am - 10:45am	ONLINE

ARHU158V **Explorations in Arts and Humanities; Identity in Graphic Narrative Texts**

Credits: 3 Grading Method: Regular General Education: DSSP

A first-year innovation and research experience. It introduces multiple disciplinary perspectives within a given theme to understand human beings, cultures and societies. Students will learn about key questions, concepts, methods, and practices within ARHU and will engage in original humanistic research while working with campus and college tools and resources.

Restricted to first semester first year students in the College of Arts and Humanities. Art Spiegelman's ground-breaking, Pulitzer Prize-winning Maus ushered in a golden era for graphic novels. This course will examine representations and explorations of identity in graphic narrative texts. Drawing from the fields of literature, philosophy, politics, and gender and sexuality studies, questions we will address include: How do individuals form their identity? Can individuals form an identity free from the influences of family, religion, media, society? How do power structures affect constructions of identity? Also, what are the formal characteristics that make the graphic novel well suited for exploring identity?

0101	Peter Witte	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	ONLINE

ARHU158W **Explorations in Arts and Humanities; Language and Racism**

Credits: 3 Grading Method: Regular General Education: DSSP

A first-year innovation and research experience. It introduces multiple disciplinary perspectives within a given theme to understand human beings, cultures and societies. Students will learn about key questions, concepts, methods, and practices within ARHU and will engage in original humanistic research while working with campus and college tools and resources.

Restricted to first semester first year students in the College of Arts and Humanities. This sociolinguistics seminar is addressed to incoming ARHU majors, particularly those seeking a degree that will allow them to teach any language (including both L1 and L2) at any educational level. It is anchored in a critical interdisciplinary approach -- sociolinguistics, applied linguistics, Hispanic applied linguistics, linguistic anthropology, sociology, social psychology, race studies, Latinx studies, language acquisition, education, Hip-Hop studies -- that emphasizes the social, political and ideological dimensions of language. Its objective is to raise linguistic awareness through the implementation of antiracist language teaching methods in the language classroom.

0101	Jose Magro MW 9:30am - 10:45am	Seats (Total: 25) ONLINE

ARHU230 **Introduction to Humanities, Health, and Medicine**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department. Cross-listed with: ENGL254, HIST219N. Credit only granted for: ARHU230 , ENGL289C, ENGL254 or HIST219N.

An overview of the historical, cultural, ethical, and spiritual dimensions of medicine, human health, disease, and death from the points of view of various humanistic disciplines.

0101	Marybeth Shea MWF 12:00pm - 12:50pm	Seats (Total: 22) ONLINE

ARHU240 **Cultural Institutions of the United States**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introduction to cultural institutions in the United States, while providing student exposure to the professional environment artist find themselves in. In order for artist and arts administrators to succeed after their educational experience it is critical to understand the history of their respective field, and which events and questions have shaped, and are shaping, their industry. This course is very much an interdisciplinary initiative. Over the past century the arts have become ever-more integrated with one another resulting in a requirement of not only understanding one discipline, but how other disciplines affect a particular practice.

Cross-listed with TDPS258C. Credit granted for ARHU240 or TDPS258C.

0101	Janet Schroeder MW 3:30pm - 4:45pm	Seats (Total: 25) ONLINE

ARHU269M **Special Topics in Study Abroad II; Sicily Against the Mafia**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARHU269P **Special Topics in Study Abroad II; Mystery Paintings**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARHU269V **Special Topics in Study Abroad II; Vienna and Budapest Field Study**

Credits: 1-6 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARHU275 **Scriptwriting for Theater, Film, and Television**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DSHU, DSSP

Cross-listed with: ENGL275. Credit only granted for: ENGL275 or ARHU275.

Introduction to the theory and practice of scriptwriting with an opportunity to read, view, evaluate, write, and revise texts meant to be performed. Students will practice writing for the stage, film, and television and also examine selected scripts, performances, and film and television clips as models for their own creative work. Students will complete frequent writing exercises, participate in workshops, and learn to apply scholarship to the analysis and critique of scripts.

0101	Melanie Rio TuTh 3:30pm - 4:45pm	Seats (Total: 15) ONLINE
0102	Melanie Rio TuTh 3:30pm - 4:45pm *This section is restricted to students in the Jimenez-Porter Writers' House.*	Seats (Total: 5) ONLINE
0201	Paul Cote MWF 10:00am - 10:50am	Seats (Total: 20) ONLINE

ARHU286 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-College of Arts & Humanities. Restriction: Minimum cumulative GPA of 2.5; and must be in a major or minor in ARHU - College of Arts and Humanities; and must have earned a minimum of 12 credits; and must not have earned more than 60 credits.

Designed for students who have completed fewer than 60 credits, students who are in their first semester at the University of Maryland, and/or students who wish to complete legislative internships, research-based internships, some start-up internships and some remote internships. All students must be enrolled in an ARHU major or minor and the internship must be in one of the academic fields covered within the College of Arts and Humanities. In addition to completing their required hours on site, students with fewer than 60 credits and students who are in their first semester at the University of Maryland will be required to attend three bi-weekly seminars at the beginning of the semester to help develop their para-professional goals and understandings.

0101	Paula Nadler Contact instructor or department for details.	Seats (Total: 5)

ARHU309 **Writers' House Colloquium: Creative Writing in Community**

(Perm req)

Credits: 1 Grading Method: Regular

Colloquium designed to improve students' skills in literary and communication arts through lectures, workshop and discussions on the history and craft of writing across cultures. Topics include poetry and fiction in translation, and exploration of modes of critique, elements of craft of fiction and poetry, writing for different media, genre writing, writing for performance, screen or scriptwriting and creative non-fiction.

For Writers House students only.

0101	Vivianne Salgado W 3:30pm - 5:00pm	Seats (Total: 15) ONLINE
0201	Johnna Schmidt W 7:00pm - 8:30pm *The first class period will be conducted online, at which point the schedule for the rest of the semester will be distributed.*	Seats (Total: 15) SYM 0200
0301	Jacqueline Mueck W 5:15pm - 6:45pm *The first class period will be conducted online, at which point the schedule for the rest of the semester will be distributed.*	Seats (Total: 15) SYM 0200

ARHU319A **Writers' House Second Year Colloquium: Form and Theory of Creative Writing; Prose**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSHU, DSSP

Required course for Writers' House students pursuing the notation program. Offered in either poetry or imaginative prose writing. Students work at the intermediate level, refining creative writing skills through cross-cultural reading and writing exercises. As part of the course, students attend a series of lectures and readings given by professional writers.

For Writers' House students only. For further details please contact Johnna Schmidt jmschmid@umd.edu.

0101	Vivianne Salgado	Seats (Total: 15)	
	M 3:30pm - 6:00pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

ARHU319B **Writers' House Second Year Colloquium: Form and Theory of Creative Writing; Poetry**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSHU, DSSP

Required course for Writers' House students pursuing the notation program. Offered in either poetry or imaginative prose writing. Students work at the intermediate level, refining creative writing skills through cross-cultural reading and writing exercises. As part of the course, students attend a series of lectures and readings given by professional writers.

For Writers' House students only. For further details please contact Johnna Schmidt jmschmid@umd.edu.

0101	Laura Lauth	Seats (Total: 15)	
	Th 5:30pm - 8:00pm	ONLINE	
	Contact instructor or department for details.		

ARHU319C **Writers' House Second Year Colloquium: Form and Theory of Creative Writing; Spoken Word**

(Perm req)

Credits: 1 Grading Method: Regular General Education: DSHU, DSSP

Required course for Writers' House students pursuing the notation program. Offered in either poetry or imaginative prose writing. Students work at the intermediate level, refining creative writing skills through cross-cultural reading and writing exercises. As part of the course, students attend a series of lectures and readings given by professional writers.

For further details, please contact Johnna Schmidt at jmschmid@umd.edu.

0101	Naliyah Kaya M 6:00pm - 8:00pm Contact instructor or department for details.	Seats (Total: 15) ONLINE

ARHU338 **Undergraduate Teaching Assistantship in a Living Learning Program**

(Perm req)

Credits: 3 Grading Method: Regular

Offers exceptional students the opportunity to work closely with a faculty member and gain valuable experience. ARHU Living learning program UTAs also serve as peer mentors and program leaders. They assist with course planning, research, and student advising (as appropriate). We are also allowing for variable credit (1-3 cr hrs).

0101	Johnna Schmidt Contact instructor or department for details.	Seats (Total: 10)
0102	Jason Farman Contact instructor or department for details.	Seats (Total: 2)
0103	Jessica Lu Contact instructor or department for details.	Seats (Total: 2)

ARHU375 **The TV Writers Room Screenwriting for Television and Video**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: ARHU275, ARHU318, or FILM370; and permission of instructor. Additional information: Priority in enrollment will be given to students participating in the Jimenez-Porter Writers' House and FILM studies programs.

Students engage with the theory and practice of screenwriting for television and video. Students read and watch teleplays designed to teach advantages of the television format. Students apply what they learn to prepare frequent writing exercises, share and provide feedback for peers scripts in a workshop format, and work together as a Writers Room to prepare an original pilot episode.

0101	Paul Cote M 12:30pm - 3:00pm	Seats (Total: 15) ONLINE

ARHU386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail General Education: DSSP

Prerequisite: Permission of ARHU-College of Arts & Humanities. Restriction: Junior standing or higher.

0101	Paula Nadler Contact instructor or department for details.	Seats (Total: 30)
0301	Susan Miller Contact instructor or department for details. *This section is restricted to students enrolled in the Arts Leadership Minor.*	Seats (Total: 3)

ARHU440 **Arts Leadership Seminar**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with: TDPS440. Credit only granted for: TDPS4440 or ARHU440.

An advanced seminar in arts leadership exposing students to the foundations of arts leadership in not-for-profit organizations as it intersects with current trends in technology, demographics, government policy, and the economy. In case studies based on examples drawn from local arts organizations, students will learn about audience engagement as well as institutional development terminology and best practices.

0101	Leayne Dempsey M 1:00pm - 3:30pm	Seats (Total: 15) ONLINE

ARHU468A **Peer Mentoring Program; Arts and Humanities' Ambassador Program**

(Perm req)

Credits: 1 Grading Method: Regular

A workshop for sophomore, junior or senior students who wish to serve as peer mentors helping first-year students to cope with the numerous issues which often arise in the transition to the university.

Restricted to current ARHU students who will serve as ambassadors for the College of Arts and Humanities.

0101	Amanda Bachert Th 4:00pm - 5:30pm	Seats (Total: 20) ONLINE

ARHU486 **Internship Practicum in Arts and Humanities**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Have completed previous internship at U of MD. Restriction: Must be in a major in ARHU-College of Arts & Humanities; and permission of ARHU-College of Arts & Humanities; and minimum cumulative GPA of 2.5; and must have earned a minimum of 60 credits; and completed 12 credits at U of MD.

An internship intended for students who have already completed an internship for credit. ARHU486 must be a different experience from the internship students have already taken for credit. Generally students intern with a different company, but they may continue working for the same company if the job is significantly different. See ARHU internship coordinator for details.

0101	Paula Nadler	Seats (Total: 25)
	Contact instructor or department for details.	

ARHU489 **Advanced Internship Practicum in ARHU**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Designed for students who have already completed at least 2 upper level internship courses for academic credit. It is an advanced practicum to assist students in continuing to develop and hone their professional writing, presentation and analytical skills.

Prerequisite: Permission of the College of Arts and Humanities.

0101	Paula Nadler	Seats (Total: 2)
	Contact instructor or department for details.	

ARHU786 **Leadership and Professional Development Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: Must have completed one semester of full-time graduate study; and permission of ARHU-College of Arts & Humanities.

Professional development for graduate students interested in careers in non-academic organizations and in administrative positions in academic institutions. See department graduate program director for internship guidelines and applicability to graduate program requirements.

Contact department for information to register for this course.

ARMY Army Fall 2020

ARMY106 **Basic Military Science I**

Credits: 3 Grading Method: Regular

Restriction: Students must meet Officer candidate criteria to participate in field training.

Introduction to the personal challenges and competencies that are critical for effective leadership and communication. Develops knowledge and competency in physical fitness through rigorous training and experiential leadership education through leadership laboratories.

0101	John Andrews, Marisa Pace, Cody Davis TuTh 11:00am - 12:15pm	Seats (Total: 40) ONLINE
0102	John Andrews, Marisa Pace, Cody Davis MWF 9:00am - 9:50am	Seats (Total: 40) ONLINE
FC01	Cody Davis, John Andrews, Marisa Pace TuTh 11:00am - 12:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 9) ONLINE
FC02	John Andrews, Marisa Pace, Cody Davis MWF 9:00am - 9:50am *Restricted to students in Freshmen Connection.*	Seats (Total: 9) ONLINE

ARMY199 **ARMY ROTC INDEPENDENT STUDY**

(Perm req)

Credits: 3 Grading Method: Regular

Exploration of the Army Leadership Model through classroom instruction, leadership training and mentorship. Develops knowledge and competency in physical fitness through rigorous training and experiential leadership education through leadership laboratories.

Restriction: Permission of UGST-Army ROTC. Repeatable to 6 credits if content differs. Credit only granted for: ARMY199 or ARMY 105 ARMY199 or ARMY106. Additional information: -Intended to impart the lecture curriculum of ARMY105 or ARMY106, Basic Military Science I and II, without the labs for Cadets who have schedule conflicts. Exploration of the Army Leadership Model through classroom instruction leadership training and mentorship. Develops knowledge and competency in physical fitness through rigorous training and experiential leadership education through leadership laboratories.

0101	Marisa Pace, Cody Davis, John Andrews Class time/details on ELMs	Seats (Total: 25) ONLINE

ARMY201 **Army Leadership Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Sophomore standing or higher.

This course is an intensive examination of the Army Leadership Model in practice. The model is compared to leadership styles and techniques from government and industry and the comparative effectiveness of each. Students form their own personal leadership styles.

0102	Marisa Pace, James Choi	Seats (Total: 30)	
	TuTh 12:30pm - 1:45pm	ONLINE	

ARMY299 **ARMY ROTC INDEPENDENT STUDY**

Credits: 3 Grading Method: Regular

This course is an intensive examination of the Army Leadership Model in practice. The model is compared to leadership styles and techniques from government and industry and the comparative effectiveness of each. Students form their own personal leadership styles.

0101	James Choi, Marisa Pace	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	

ARMY301 **Advanced Military Leadership I**

Credits: 3 Grading Method: Regular

Reinforces understanding and application of Army leadership strategies, critical decision making methodologies, physical and mental fitness excellence. Includes a laboratory period in applied leadership, common military tasks and physical fitness.

0101	Marisa Pace, Ashley Miller	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm	ONLINE	
	Th 4:00pm - 6:00pm	ARM 0126	Lab
	MWF 6:30am - 7:30am	ARM 0126	Lab

ARMY399 **ARMY ROTC INDEPENDENT STUDY**

(Perm req)

Credits: 3 Grading Method: Regular

Reinforces understanding and application of Army leadership strategies, critical decision making methodologies, physical and mental fitness excellence. Includes a laboratory period in applied leadership, common military tasks and physical fitness.

Restriction: Permission of UGST-Army ROTC. Repeatable to 2 credits if content differs. Credit only granted for: ARMY399 or ARMY301. Additional information: -Intended to impart the lecture curriculum of ARMY301, Advanced Military Leadership, without the labs for Cadets who have schedule conflicts. Reinforces understanding and application of Army leadership strategies, critical decision making methodologies, physical and mental fitness excellence. Includes a laboratory period in applied leadership, common military tasks and physical fitness.

0101	Marisa Pace, Ashley Miller	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	

ARMY401 **Advanced Military Leadership III**

Credits: 3 Grading Method: Regular

Introduces contracted students to the study of Army structure, practices and processes exercised by Army Commanders and Staff in completing personnel, logistics, training and combat operations. Includes a laboratory in applied leadership skills and two field exercises.

0101	Marisa Pace	Seats (Total: 30)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	Th 4:00pm - 6:00pm	ARM 0135	Lab
	MWF 6:30am - 7:30am	ARM 0135	Lab

ARMY499 **ARMY ROTC INDEPENDENT STUDY III**

(Perm req)

Credits: 3 Grading Method: Regular

Introduces contracted students to the study of Army structure, practices and processes exercised by Army Commanders and Staff in completing personnel, logistics, training and combat operations. Includes a laboratory in applied leadership skills and two field exercises.

Restriction: Permission of UGST-Army ROTC. Repeatable to 2 credits if content differs. Credit only granted for: ARMY499 or ARMY401. Additional information: -Intended to impart the lecture curriculum of ARMY301, Advanced Military Leadership III, without the labs for Cadets who have schedule conflicts. Introduces contracted students to the study of Army structure, practices and processes exercised by Army Commanders and Staff in completing personnel, logistics, training and combat operations. Includes a laboratory in applied leadership skills and two field exercises.

0101	Marisa Pace	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

ARSC Air Science Fall 2020

ARSC059 **Air Force Officer Lab**

Credits: 1 Grading Method: Sat-Fail

Offers Air Force ROTC cadet officer's practical experience in military leadership, management, organization, and customs. May include visits to military installations, weekend laboratories, and flight orientation.

Class will have online meetings with an option to meet face-to-face. See instructor for details. Restriction: Must be an AFROTC cadet. Repeatable to 10 credits if content differs. Formerly: ARSC159. Additional information: This course does not carry any credit toward any degree at the University.

0101	Joshua Rager, Zachary Crampton, Isham Nichols Th 7:00am - 8:50am Contact instructor or department for details.	Seats (Total: 220) ONLINE	Lab
FC01	Isham Nichols, Joshua Rager, Zachary Crampton Th 7:00am - 8:50am Contact instructor or department for details. *Restricted to students in Freshmen Connection.*	Seats (Total: 10) ONLINE	Lab

ARSC100 **The USAF Today I**

Credits: 1 Grading Method: Regular

Corequisite: AFROTC cadets must also register for ARSC059.

Freshman course for AFROTC cadets. Introduces students to the United States Air Force and encourages participation in Air Force Reserve Officer Training Corps. Featured topics include: overview of ROTC, special programs offered through ROTC, mission and organization of the Air Force, brief history of the Air Force, introduction to leadership and leadership related issues, Air Force Core Values, Air Force officer opportunities, and an introduction to communication studies. Leadership laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

An elective but required for freshmen desiring the four-year AFROTC program.

0101	Steven Freund Tu 9:00am - 9:50am	Seats (Total: 27) MMH 1400
0102	Steven Freund Th 9:00am - 9:50am	Seats (Total: 40) ARM 0126
0103	Steven Freund Th 1:00pm - 1:50pm	Seats (Total: 35) ARM 0131
FC01	Steven Freund Tu 9:00am - 9:50am *Restricted to students in Freshmen Connection.*	Seats (Total: 10) MMH 1400
FC02	Steven Freund Th 9:00am - 9:50am *Restricted to students in Freshmen Connection.*	Seats (Total: 10) ARM 0126

ARSC200 **The Development of Air Power I**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Corequisite: AFROTC cadets must also register for ARSC059.

Sophomore course for AFROTC cadets. Study of factors contributing to the development of air power from its earliest beginnings through two world wars; the evolution of air power concepts and doctrine; introductory leadership; and assessment of communicative skills.

An elective, but required for sophomores in the four-year AFROTC program. Military cadets must also enroll in ARSC 159.

0101	Joshua Rager Th 10:00am - 10:50am	Seats (Total: 40) ARM 0126
0102	Joshua Rager Th 2:00pm - 2:50pm	Seats (Total: 35) ARM 0131
0103	Joshua Rager Tu 11:00am - 11:50am	Seats (Total: 27) ARM 0126

ARSC300 **Management and Leadership I**

(Perm req)

Credits: 3 Grading Method: Regular

Corequisite: AFROTC cadets must also register for ARSC059; or permission of UGST-AFROTC-Air Science. Restriction: Junior standing or higher.

The study of leadership and management fundamentals, professional knowledge, Air Force doctrine, and written and oral communication skills. Case studies are used to examine leadership and management situations. This course will satisfy credit toward a minor in military studies.

0101	Isham Nichols Th 9:00am - 12:00pm	Seats (Total: 35) MMH 1400
0102	Isham Nichols TuTh 12:30pm - 1:45pm	Seats (Total: 20) ARM 0135
0103	Isham Nichols MW 9:30am - 11:00am	Seats (Total: 20) ARM 0131

ARSC400 **National Security Forces in Contemporary American Society I**

(Perm req) Credits: 3 Grading Method: Regular

Prerequisite: Permission of UGST-AFROTC-Air Science; or (ARSC300 or ARSC301). Corequisite: ARSC059; or permission of UGST-AFROTC-Air Science. Restriction: Senior standing.

Study of American national security policy and processes to include information and implementation, impact of major national and international actors, and development of major policy issues. This course will satisfy credit towards a minor in military studies.

0101	Zachary Crampton Th 9:00am - 12:00pm	Seats (Total: 27) ESJ 2208
0102	Zachary Crampton TuTh 2:00pm - 3:30pm	Seats (Total: 18) ARM 0135

ARTH Art History & Archaeology Fall 2020

ARTH169A Special Topics in Study Abroad I; Roman Archaeology On-Site

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH169B Special Topics in Study Abroad I; Arts of Modernity

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH169I Special Topics in Study Abroad I; Art of Rome

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH200 Art and Society in Ancient and Medieval Europe and the Mediterranean

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU, DVUP

Examines the material culture and visual expressions of Mediterranean and European societies from early times until ca. 1300 CE, emphasizing the political, social, and religious context of the works studied, the relationships of the works to the societies that created them, and the interrelationship of these societies.

0101	Emily Egan Class time/details on ELMs M 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Emily Egan Class time/details on ELMs M 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Emily Egan Class time/details on ELMs W 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0104	Emily Egan Class time/details on ELMs W 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0105	Emily Egan Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0106	Emily Egan Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

ARTH201 **Art and Society in the West from the Renaissance to the Present**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HA	General Education: DSHU, DVUP

Examines representative European and American works of art from the later Middle Ages to the present, highlighting the dynamic exchange between artistic and cultural traditions both within periods and across time.

0101	Steven Mansbach Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0102	Steven Mansbach Class time/details on ELMs M 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0103	Steven Mansbach Class time/details on ELMs W 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0104	Steven Mansbach Class time/details on ELMs M 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
FC01	Abigail Upshaw MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 28) ONLINE	

ARTH260 **Art and Activism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DSSP, SCIS

Can art effect social change? How may we use the history of radical and avant-garde art to inform present-day movements and models of artistic and creative activism? This course explores the modern and contemporary history of political art and arts activism on local, national, and global scales.

0101	Abigail McEwen MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0102	Abigail McEwen MW 11:00am - 11:50am Tu 9:30am - 10:20am	Seats (Total: 25) ONLINE ONLINE	Discussion
0103	Abigail McEwen MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion

ARTH260C **Art and Activism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DSSP, SCIS

Can art effect social change? How may we use the history of radical and avant-garde art to inform present-day movements and models of artistic and creative activism? This course explores the modern and contemporary history of political art and arts activism on local, national, and global scales.

Restricted to students in Carillon Communities.

0101	Abigail McEwen	Seats (Total: 25)	
	MW 11:00am - 11:50am	ONLINE	
	M 9:00am - 9:50am	ONLINE	Discussion

ARTH262 **Public Art**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHU, DSSP

How does public art function on a university campus, in major cities, and across the United States? Can emerging technologies support the interpretation, experience, and reception of public art in new, and imaginative, ways? This course invites students to empirically study the modern history and civic values of public art spanning sculpture, painting, mixed-media, and installation. We consider the nature of public space, the politics of representation and community, and the civic and memorial functions of art. Leveraging a panoply of digital tools, students generate metadata, prototype creative interventions and experiences, and collectively write a community-sourced history of public art.

0101	Abigail McEwen	Seats (Total: 25)
	M 2:00pm - 4:30pm	ONLINE

ARTH269P **Special Topics in Study Abroad II; From Medieval to Contemporary: Exploring the Great Art and Architecture of Prague**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH269R **Special Topics in Study Abroad II; Art of Renaissance**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH303 **Roman Art and Archaeology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Sites and monuments of painting, sculpture, architecture, and the minor arts from the earliest times through the third century A.D. with emphasis on the Italian peninsula from the Etruscan period through that of Imperial Rome.

0101	Maryl Gensheimer	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

ARTH305 Archaeological Methods and Practice

Credits: 3 | Grading Method: Regular | General Education: DSHS

Prerequisite: ANTH240, ARTH200, or CLAS180. Cross-listed with: ANTH305, CLAS305, JWST319Y. Credit only granted for: ANTH305, ARTH305, CLAS305, or JWST319Y.

A team-taught, interdisciplinary course discussing theories, methods, and ethical issues in the practice of archaeology.

0101	Jorge Bravo	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	ONLINE

ARTH337 Cities and the Arts

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Cities and the Arts, as taught by different faculty members in the Department of Art History and Archaeology, will investigate the urban environment and visual culture(s) of one or several major centers. The class will consider how a large city's culture absorbs, transforms, and utilizes multiple external sources in developing a particular local brand defined as its "identity." It examines the visualization of ideals of local coherence as well as the arts of fragmentation and competing internal cultures. Cities and the Arts considers how a large city's interface with an expanding external world, even a global one, allows for appropriations and the rise of discrimi-nations; it examines how exclusions form within the city itself, and how social groups visually articulate identities that may run counter to the larger urban mythology.

0101	Elizabeth Honig	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	ONLINE

ARTH359I Film as Art; Gilliam and Cronenberg: The Existential Individual in an Absurd World

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

The study of film as a visual art, from theoretical, cultural and aesthetic perspectives. Content varies by semester.

Terry Gilliam (a picture guy) and David Cronenberg (a word guy) come from a mindset of the modernist/ existentialist worldview but make their artwork in an ironic/postmodern world the filmmakers both consider the lack of meaning in the world and the powerlessness of the individual. Gilliam thinks of identity in terms of imagination; Cronenberg thinks in terms of the body's effect on the mind. Both explore the role of the artist and the individual and the nature and forms of reality. Trigger warning: Many of these films depict physicality, nudity, sexuality and violence that tend to disturb some people.

0101	Greg Metcalf	Seats (Total: 25)
	W 3:30pm - 7:00pm	ONLINE

ARTH369G **Special Topics in Study Abroad III; Art Gallery Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH369P **Special Topics in Study Abroad III; History and Workshop of Latin America Photography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH369Q **Special Topics in Study Abroad III; Patrons and Artists in Baroque Italy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH370 **Latin American Art and Archaeology before 1500**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pre-Hispanic painting, sculpture, and architecture, with a focus on the major archaeological monuments of Mexico.

0101	Beryl Bland	Seats (Total: 23)
	W 2:00pm - 4:30pm	ASY 2203

ARTH386 **Experiential Learning**

Credits: 3-6 | Grading Method: Regular, Pass-Fail | General Education: DSSP

Prerequisite: Permission of ARHU-Art History & Archaeology department. Restriction: Junior standing or higher.

Supervised internship experience in diverse areas of art historical, archaeological, and museological work.

Contact department for information to register for this course.

ARTH389A **Special Topics in Art History and Archaeology; The Art of Drawing: A Left and Right Brain Experience**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

This course examines Old and Modern Master Drawings, theories of drawing and drawing practice. Lectures will discuss Dr. Betty Edward's theory of a verbal, analytical Left Brain and a visual, perceptual Right Brain. As practice, students will learn to make the mental shift from left, analytical brain to right, visual brain. Class exercises are based on Betty Edward's text, Drawing on the Right Side of the Brain. No prior drawing experience is necessary.

0101	Beryl Bland	Seats (Total: 10)
	W 10:00am - 12:30pm	TWS 1310

ARTH389B **Special Topics in Art History and Archaeology; The Art of Color: A Left and Right Brain Experience**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

This course is about understanding color and experiencing color. The course is composed of two parts, a lecture and color practice. The lectures examine a wide range of old and modern master paintings from Antiquity to the Twentieth Century. The lectures also examine how artists use color in a variety of media to distinctively record their surroundings, express their emotions and explore the aesthetics of color applications. The practice portion of this course is composed of color/painting assignments that challenge students beyond color theory. Students will complete a series of exercises based on Dr. Betty Edward's text, Color, A Course in Mastering the Art of Mixing Color. No prior drawing or painting experience is necessary. However, students should be willing to extend a concerted amount of time and effort on each studio assignment.

0101	Beryl Bland	Seats (Total: 10)
	F 10:00am - 12:30pm	TWS 1310

ARTH389L **Special Topics in Art History and Archaeology; Visual Cultures of Islam**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Crosslisted with HIST219E, AAST298B, PERS298E, and RELS219E. Credit granted for HIST219E, ARTH389L, AAST298B, PERS298E, or RELS219E. Visual Cultures of Islam is part of the Digital Islamic Studies Curriculum (digitalislam.umich.edu). This course is taught by renowned University of Michigan instructor Christiane Gruber, an expert in the field of Islamic Art, and digitally shared with the University of Maryland. In this course, Professor Gruber explores definitions of "Islamic" art and investigates various visual cultures of Islam around the world from the 7th to the 20th century. The course meets twice a week in real time using video conferencing technology and students are able to enroll directly at Maryland for course credit.

0101	Instructor: TBA	Seats (Total: 12)
	TuTh 11:30am - 1:00pm	ONLINE

ARTH389O **Special Topics in Art History and Archaeology; Activist and Critical Art in Contemporary Iran**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Cross-listed with PERS298M. Credit only granted for PERS298M or ARTH389O. Exploration of Iranian visual and performing artists' intent and hope for change and their playful strategies for making a difference while using diverse and unique transgressive stories and styles to address themes of social justice and critical intervention. Aiming at bridging the readings with current events, class-time is used for lecture, open discussion, (virtual)role-playing, and creative responses. Taught in English.

0101	Marjan Moosavi	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ONLINE

ARTH389Q **Special Topics in Art History and Archaeology; Classic Foreign Films**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Cross-listed with FILM359X. Credit only granted for ARTH389Q or FILM359X. Students will explore classic foreign films from India, Japan, China, France, Italy, Germany, Denmark, Sweden, Russia, and other countries. This course is designed to enable students to examine historically and artistically significant films made since 1945 by some of the most important directors in world cinema. By examining these representative examples of classic foreign films (such as The 400 Blows, Bicycle Thieves, Red Sorghum) in their geopolitical and institutional contexts, students will learn and understand how these films embody as well as give expression to modern and contemporary culture, society, and history. All films are subtitled.

0101	Jason Kuo	Seats (Total: 25)
	Tu 2:00pm - 4:30pm	ONLINE

ARTH488A **Colloquium in Art History; The Art and Archaeology of Bronze Age Pylos**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Colloquium to investigate a specific topic in depth.

Come take an in-depth look at one of the oldest and most celebrated sites of ancient Greece. This colloquium will examine the site of Pylos and its showpiece, the "Palace of Nestor" - offering a rich archaeological-art historical perspective on Bronze Age architecture, artifacts, and their modern reception.

0101	Emily Egan	Seats (Total: 12)
	M 1:00pm - 3:30pm	ONLINE

ARTH488B **Colloquium in Art History; Living Lodging, Dwelling, Inhabiting Spaces in Early Modern Europe**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Colloquium to investigate a specific topic in depth.

Explores different types of living space, who lived in them, and how they utilized the spaces they inhabited, from palaces and cloisters around 1500, to country and city houses around 1600, to the newly comfortable home of around 1700.

0101	Elizabeth Honig	Seats (Total: 12)
	TuTh 12:30pm - 1:45pm	ONLINE

ARTH489O **Special Topics in Art History; Art in the Museum World**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

This course is intended for upper division students majoring in art history, but it is open to anyone interested in the museum world. Its main goal is to introduce various facets of museum work and possible career paths within that environment. Many of the meetings will take place in museums and other art institutions in the Washington area. Each of them will address a particular aspect of museum work through a conversation with museum professionals and/or guided tours through different departments. Topics to be discussed include, but are not limited to, curatorial work, collection display and preservation, and outreach programs that promote a more meaningful relationship between museums and their audiences.

0101	Aneta Georgievska-Shine	Seats (Total: 15)
	F 2:00pm - 4:30pm	ONLINE

ARTH489Q **Special Topics in Art History; Global Art Cinemas**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with FILM429G. Credit granted for ARTH489Q or FILM429G. Global art cinemas often challenge their audiences and demand more active engagement because of their unconventional modes of story-telling and their emphases on the directors personal expressions. Students will critically examine some of the most talked-about and engaging art films; they will also consider the influence of art history on the films by such great directors as Wong Kar-wai, Bresson, Visconti, Scorsese, Figueroa, Varda, Campion, Reichardt, Potter, Tarantino, Greenaway, and Resnais.

0101	Jason Kuo Th 2:00pm - 4:30pm	Seats (Total: 15) ONLINE

ARTH489V **Special Topics in Art History; Markets and Collecting**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with ARTT489C. Credit granted for ARTT489C or ARTH489V.

0101	Rex Weil Th 11:30am - 2:00pm	Seats (Total: 15) ONLINE

ARTH498 **Directed Studies in Art History I**

(Perm req)

Credits: 2-3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ARTH499 **Honors Thesis**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ARTH692 **Methods of Art History**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Methods of research and criticism applied to typical art-historical problems; bibliography and other research tools.

For all non-Art History and Archaeology majors, permission of the department is required.

0101	Jordana Saggese F 1:00pm - 3:30pm	Seats (Total: 7) ONLINE

ARTH738G **Seminar in Seventeenth-Century Southern European Art; Realizing the Artistic Idea from Early Modernity to the Nineteenth Century**

Credits: 3 Grading Method: Regular, Audit

0101	Anthony Colantuono Tu 12:00pm - 2:30pm	Seats (Total: 7) ONLINE

ARTH779F **Seminar in Japanese Art; Art and the Cold War: The View from Japan**

Credits: 3 Grading Method: Regular, Audit

The Cold War was a global event, and its art ideologically motivated, but English-language histories rarely include objects or perspectives from outside America and Europe. East Asia, of course, was a major site in the East-West struggle between "the free world" and Communism: it saw China's Communist Revolution, the war in Korea, and America's long occupation of Japan. Adopting the view from Japan, this course will consider the cultural role of the art of the Cold War in social, geopolitical and transnational contexts.

0101	Alicia Volk Th 12:00pm - 2:30pm	Seats (Total: 7) ONLINE

ARTH798 **Directed Graduate Studies in Art History**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

ARTH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ARTH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ARTH899 **Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ARTT Art Studio Fall 2020

ARTT100 **Two-Dimensional Design Fundamentals**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Principles and elements of two-dimensional design. Introduction to visual communication.

Students must pay a $40.00 laboratory studio fee.

0101	Peter Cullen TuTh 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
0201	Peter Cullen TuTh 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
0501	Wendy Jacobs MW 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
0601	Wendy Jacobs MW 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
0701	Wendy Jacobs MW 3:30pm - 6:00pm	Seats (Total: 18) ONLINE	Lab
0801	Wendy Jacobs MW 3:30pm - 6:00pm	Seats (Total: 18) ONLINE	Lab

ARTT110 **Elements of Drawing I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Fundamental concepts, media, and processes of drawing. Emphasis on observation and representation in combination with individual expression. Subject matter includes still life, human figure, nature, the built environment, and conceptual projects.

Students must pay a $40.00 laboratory studio fee.

0101	Rachel Scully MW 9:00am - 11:30am	Seats (Total: 18) ONLINE	Lab

0201	Rachel Scully MW 9:00am - 11:30am	Seats (Total: 18) ONLINE	Lab
0501	Peter Cullen TuTh 9:00am - 11:30am	Seats (Total: 18) ONLINE	Lab
0701	Rachel Scully MW 3:30pm - 6:00pm	Seats (Total: 18) ONLINE	Lab
0801	Rachel Scully MW 3:30pm - 6:00pm	Seats (Total: 18) ONLINE	Lab
0901	Jowita Wyszomirska TuTh 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
1001	Jowita Wyszomirska TuTh 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
1101	Brandon Donahue MW 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
1201	Brandon Donahue MW 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
FC01	Noah McWilliams MW 6:00pm - 8:30pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE	

ARTT110S **Elements of Drawing I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Fundamental concepts, media, and processes of drawing. Emphasis on observation and representation in combination with individual expression. Subject matter includes still life, human figure, nature, the built environment, and conceptual projects.

Restricted to College Park Scholars - Arts. Students must pay a $40.00 laboratory studio fee.

0601	Peter Cullen TuTh 9:00am - 11:30am	Seats (Total: 18) ONLINE	Lab

ARTT150 **Introduction to Art Theory**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU

Fundamental concepts of global, philosophic, and critical art theory examined through various historic and contemporary texts, and the analysis of works of art.

0101	Richard Klank MW 1:00pm - 1:50pm M 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Richard Klank MW 1:00pm - 1:50pm W 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Richard Klank MW 1:00pm - 1:50pm W 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0201	Rex Weil TuTh 3:30pm - 4:20pm Tu 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0202	Rex Weil TuTh 3:30pm - 4:20pm Th 2:30pm - 3:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0203	Rex Weil TuTh 3:30pm - 4:20pm Th 12:30pm - 1:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
FC01	Rex Weil TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE	

ARTT200 **Three-Dimensional Art Fundamentals**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT100 and ARTT110.

Fundamental concepts of three-dimensional form and space examined through the manipulation and organization of various materials.

Students must pay a $40.00 laboratory studio fee.

0101	Jeremy Kunkel MW 9:00am - 11:30am	Seats (Total: 18) ONLINE	Lab
0201	Foon Sham TuTh 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
0301	Jeremy Kunkel MW 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab

ARTT210 **Elements of Drawing II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT110.

Continuation of ARTT110 with additional emphasis on color, figure drawing, and contemporary issues.

Students must pay a $40.00 laboratory studio fee.

0101	Emily Conover TuTh 12:30pm - 3:00pm	Seats (Total: 16) ONLINE	Lab
0201	Brandon Donahue MW 3:30pm - 6:00pm	Seats (Total: 16) ONLINE	Lab
0301	Leah Laird MW 12:30pm - 3:00pm	Seats (Total: 16) ONLINE	Lab
0401	Patrick Craig TuTh 3:30pm - 6:00pm	Seats (Total: 16) ONLINE	Lab

ARTT255 **Introduction to Digital Art and Design Processes**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT100 and ARTT110. Credit only granted for: ARTT255 or ARTT354. Formerly: ARTT354.

Introduction to basic software and principles of digital imaging, and how they are applied to art and design. Topics covered: Digital image construction and manipulation, Vector-Based digital techniques layout, typography, etc), time-based digital techniques (video and audio composition and manipulation), and basic interactivity (web-design). Digital media used to explore visual principles established in ARTT100.

Students must pay a $40.00 laboratory studio fee.

0101	Narendra Ratnapala TuTh 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
0201	Narendra Ratnapala TuTh 3:30pm - 6:00pm	Seats (Total: 18) ONLINE	Lab
0301	Shannon Collis Class time/details on ELMs	Seats (Total: 18) ONLINE	Lab

ARTT269R **Special Topics in Study Abroad II; Art of Renaissance**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTT320 **Elements of Painting**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes of oil and/or acrylic painting.

Students must pay a $40.00 laboratory studio fee.

0101	Patrick Craig TuTh 12:30pm - 3:00pm *Emphasizes acrlic paint.*	Seats (Total: 18) ONLINE	Lab
0201	Richard Klank MW 9:00am - 11:30am	Seats (Total: 13) ONLINE	Lab
0301	Leah Laird MW 3:30pm - 6:00pm	Seats (Total: 18) ONLINE	Lab

ARTT341 **Elements of Printmaking: Woodcut and Relief**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to woodcuts, linocuts, and other relief printing media.

There is a $40.00 lab fee for this course.

0101	Jessica Gatlin	Seats (Total: 12)	
	MW 12:30pm - 3:00pm	ONLINE	Lab

ARTT341H **Elements of Printmaking: Woodcut and Relief**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to woodcuts, linocuts, and other relief printing media.

There is a $40.00 lab fee for this course. This course is restricted to departmental honors students only.

0101	Jessica Gatlin	Seats (Total: 2)	
	MW 12:30pm - 3:00pm	ONLINE	Lab

ARTT353 **Elements of Photography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Introduction to black-and-white photography. Basic technical and aesthetic vocabulary, camera mechanics and darkroom techniques. Introduction to the photographic message and meaning in both fine art and design concept.

Students must pay a $40.00 laboratory studio fee. SLR film camera required.

Contact department for information to register for this course.

ARTT355 **Intermediate Graphic Design Principles**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARTT150, ARTT200, ARTT210, and ARTT255; and must be admitted to the Graphic Design Concentration (Track 3). Credit only granted for: ARTT350 or ARTT355. Formerly: ARTT350.

Investigation of basic concepts, history, techniques, and materials used by professional graphic designers, focusing on typography. Explores various aspects of design related to typography through examination and production of many types of finished work.

Students must pay $40.00 laboratory studio fee.

0101	Kelsey Marotta	Seats (Total: 25)	
	MW 9:00am - 11:30am	ONLINE	Lab

ARTT356 **Graphic Design Processes**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARTT150, ARTT200, ARTT210, and ARTT255; and must have been admitted to Graphic Design Concentration (Track 3). Credit only granted for: ARTT351 or ARTT356. Formerly: ARTT351.

Explores computer graphics and visual communcation principles in a time-based context. Examination of fundamental design principles through digital projects that involve photo manipulation, digital illustration, layout, animation, and web design.

Students must pay $40.00 laboratory studio fee.

0101	Rieko Chacey	Seats (Total: 25)	
	TuTh 12:30pm - 3:00pm	ONLINE	Lab

ARTT369P **Special Topics in Study Abroad III; Spain Seen by Photography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTT370 **Elements of Digital Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT150, ARTT200, ARTT210, and ARTT255; or permission of ARHU-Art department.

Exploration of image creation and manipulation, interactivity, and linkages between digital audio and video. Emphasis on issues in contemporary digital art.

Students must pay $40.00 laboratory studio fee.

0101	Brandon Morse TuTh 12:30pm - 3:00pm	Seats (Total: 14) ONLINE	Lab
0201	Mollye Bendell MW 3:00pm - 5:30pm	Seats (Total: 14) ONLINE	Lab

ARTT386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-Art department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

ARTT389 **Department of Art Undergraduate Teaching Assistantship**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Individual contractual agreement with faculty/mentor. Individualized assistantship in the teaching of a specified department course offering. Must have previously received an "A" grade for the class to be assisting.

Contact department for information to register for this course.

ARTT399 **Department of Art Research Assistantship**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Individual contractual agreement with faculty/mentor. Individualized experiential learning developed in relation to art-related research issues.

Contact department for information to register for this course.

ARTT409K **Study Abroad Special Topics IV; New Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTT418B **Advanced Drawing Studio; A Contemporary Approach**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level drawing studio emphasizing advanced concepts and processes related to drawing; emphasis on contemporary art issues and individual directions.

Prerequisite: ARTT150, ARTT200, and ARTT210; plus one 300-level studio course; or permission of department. Students must pay a $40.00 laboratory studio fee. Repeatable to 12 credits. Multi-level drawing studio emphasizing advanced concepts and processes related to drawing; emphasis on contemporary art issues and individual directions.

0101	Matthew McLaughlin MW 12:30pm - 3:00pm	Seats (Total: 16) ONLINE	Lab
0201	Ryan Syrell MW 3:30pm - 6:00pm	Seats (Total: 16) ONLINE	Lab
0301	Jowita Wyszomirska TuTh 3:30pm - 6:00pm	Seats (Total: 16) ONLINE	Lab

ARTT418H **Advanced Drawing Studio; Honors**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level drawing studio emphasizing advanced concepts and processes related to drawing; emphasis on contemporary art issues and individual directions.

Restricted to departmental honors students only. Students must pay a $40.00 laboratory studio fee.

0101	Matthew McLaughlin MW 12:30pm - 3:00pm	Seats (Total: 2) ONLINE	Lab
0201	Ryan Syrell MW 3:30pm - 6:00pm	Seats (Total: 2) ONLINE	Lab
0301	Jowita Wyszomirska TuTh 3:30pm - 6:00pm	Seats (Total: 2) ONLINE	Lab

ARTT428 **Advanced Painting Studio; Painting**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: ARTT320 or permission of the department. Students must pay a $40.00 laboratory studio fee. Repeatable to 12 credits. Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions.

0101	Leslie Berns TuTh 12:30pm - 3:00pm	Seats (Total: 18) ONLINE	Lab
0201	Emily Conover TuTh 3:30pm - 6:00pm *Emphasizes acrylic paint.*	Seats (Total: 18) ONLINE	Lab
0301	Richard Klank MW 9:00am - 11:30am	Seats (Total: 8) ONLINE	Lab

ARTT428H **Advanced Painting Studio; Honors**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions in chosen media.

Restricted to departmental honors students only. Students must pay a $40.00 laboratory studio fee.

0101	Leslie Berns TuTh 12:30pm - 3:00pm	Seats (Total: 2) ONLINE
0201	Emily Conover TuTh 3:30pm - 6:00pm *Emphasizes Acrylic Paint*	Seats (Total: 2) ONLINE
0301	Richard Klank MW 9:00am - 11:30am	Seats (Total: 2) ONLINE

ARTT428X **Advanced Painting Studio; Advanced Painting Studio**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions in chosen media.

Contact department for information to register for this course.

ARTT454 **Advanced Graphic Design Principles: Design in Society**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARTT355 and ARTT356.

Focus on social responsibility and community activism. History and theory of propaganda and advocacy-based design. Students explore current design practices, work individually, and collaborate in teams with non-profits or other clients with community-based or socio-cultural agendas. Research and writing-intensive course.

$40 laboratory studio fee.

0101	Kelsey Marotta	Seats (Total: 25)	
	MW 12:30pm - 3:00pm	ONLINE	Lab

ARTT457 **Advanced Interactive Design**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARTT357.

Advanced concepts and techniques of interactive design and interactive software. Examination of corporate, client-based, and public service-based interactive graphic design. Emphasis on web-based interactive design structures.

$40 laboratory studio fee.

0101	Rieko Chacey	Seats (Total: 20)	
	TuTh 3:00pm - 5:30pm	ONLINE	Lab

ARTT460 **Seminar in Art Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Senior standing.

Exploration of relationship between content and processes of art in a contemporary multi-cultural context.

Contact department for information to register for this course.

ARTT468A **Seminar on the Interrelationship Between Art and Art Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The relationship between a student's work and the theoretical context of contemporary art.

Contact department for information to register for this course.

ARTT468W **Seminar on the Interrelationship Between Art and Art Theory; History and Workshop of Latin America Photography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The relationship between a student's work and the theoretical context of contemporary art.

Contact department for information to register for this course.

ARTT479D **Advanced Digital Media Studio; Immersive and Virtual Environments**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Variable multi-level studio emphasizing advanced concepts and processes related to time-based, projection, installation, interactive, and audio/visual integrated digital art. Emphasis on contemporary art issues and individual directions.

Introduction to the uses of game development software in an artistic context. Practical examination of interactive, immersive and installation art as mediated through the context of real-time computer generated imagery and game engine methodologies. Students must pay a $40.00 studio lab fee.

0101	Mollye Bendell	Seats (Total: 14)
	MW 6:00pm - 8:30pm	ONLINE

ARTT479H **Advanced Digital Media Studio; Honors Advanced Digital Media**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Variable multi-level studio emphasizing advanced concepts and processes related to time-based, projection, installation, interactive, and audio/visual integrated digital art. Emphasis on contemporary art issues and individual directions.

Prerequisite: ARTT370. Restricted to Departmental Honors students. Basics of sound recording, mixing, and processing, as well as creative applications of sound used for screen-based practices, performance and installation art. Theoretical concepts central to sound as an artistic medium are also introduced. Students must pay a $40.00 studio lab fee.

0101	Mollye Bendell	Seats (Total: 2)
	MW 6:00pm - 8:30pm	ONLINE
	Honors Immersive and Virtual Environments.	

ARTT480H **Honors Seminar**

(Perm req)

Credits: 3 Grading Method: Regular

Team-taught seminar focusing on relationship between student's work and the theoretical context of contemporary art.

Students must pay $40.00 laboratory fee.

0101	Shannon Collis	Seats (Total: 7)	
	F 10:00am - 1:30pm	ONLINE	Lab

ARTT481 **Advanced Specialization Seminar**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-Art department.

Seminar combines contemporary art theory, criticism, professional practice and career preparation in relation to students works from all areas of specialization.

0101	Ryan Syrell	Seats (Total: 15)
	W 6:00pm - 8:30pm	ONLINE

ARTT489C **Advanced Special Topics in Art; Markets and Collecting**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Cross-listed with ARTH489V. Credit granted for ARTT489C or ARTH489V.

0101	Rex Weil	Seats (Total: 15)
	Th 11:30am - 2:00pm	ONLINE

ARTT489I **Advanced Special Topics in Art; Digital Imaging**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Prerequisite: ARTT354. Students must pay a $40.00 laboratory studio fee.

Contact department for information to register for this course.

ARTT489K **Advanced Special Topics in Art; The Cast Image**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Students must pay a $40.00 laboratory studio fee. Repeatable to 12 credits. This course explores ideas and concepts relating to cast objects, image and processes. Students will explore concepts and theories relating to multiples, forensics, memory, fossils and material transformation.

0101	John Ruppert MW 12:30pm - 3:00pm	Seats (Total: 16) ONLINE

ARTT489L **Advanced Special Topics in Art; The Found Object and Mixed Media Sculpture**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail

Advanced studio art and theory within the context of a special topic.

Students must pay a $40.00 laboratory studio fee. This course explores ideas and concepts in relation to the found object, mixed media and the assemblage of unlike materials. Students will develop awareness and use of objects and materials, both natural and human-made, from their immediate surroundings. Historical and contemporary issues centered around the found object and mixed media will be examined.

0101	John Ruppert MW 3:30pm - 6:00pm	Seats (Total: 12) ONLINE

ARTT489P **Advanced Special Topics in Art; Site Specific, Natural and Human - made Materials**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail

Advanced studio art and theory within the context of a special topic.

Students must pay a $40.00 laboratory studio fee. Focus on site-specific mixed media sculpture. Scale model-building, proposal drawings and site-specific, outdoor sculptures will be executed on sites proposed by students. No machine or wood shop necessary.

0101	Foon Sham TuTh 3:30pm - 6:00pm	Seats (Total: 12) ONLINE

ARTT489Q **Advanced Special Topics in Art; Multimodal Print Studio**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail

Advanced studio art and theory within the context of a special topic.

Students must pay a $40.00 laboratory studio fee. Course explores various traditional and digital media hybrids while navigating alternative studio-based approaches. Students will be encouraged to use a range of imaging techniques such as photography, drawing, painting, collage and digital media with a focus on experimentation with materials, content and form. Individual and group critiques, readings, online presentations,and exhibitions will help to develop each student's personal approach to art making, problem solving, and visual communication.

0101	Justin Strom TuTh 12:30pm - 3:00pm	Seats (Total: 12) ONLINE
0201	Justin Strom TuTh 3:30pm - 6:00pm	Seats (Total: 12) ONLINE

ARTT489R **Advanced Special Topics in Art; New Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Contact department for information to register for this course.

ARTT489T **Advanced Special Topics in Art; Prints and the Revolution**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Advanced studio art and theory within the context of a special topic.

Students must pay a $40.00 laboratory studio fee. Course explores the significance of print in cultural, social and art movements. Using both historical and contemporary examples, students will be exposed to various artists' practices as well as a range of traditional, experimental, digital and mixed media processes. Critical thinking and contemporary discourse will be a major component of the course.

0101	Jessica Gatlin MW 3:30pm - 6:00pm	Seats (Total: 12) ONLINE

ARTT498A **Directed Studies in Studio Art**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studio time arranged.

Students must pay a $40.00 studio lab fee.

Contact department for information to register for this course.

ARTT498B **Directed Studies in Studio Art**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studio time arranged.

Students must pay a $40.00 studio lab fee.

Contact department for information to register for this course.

ARTT498H **Directed Studies in Studio Art; Honors Thesis**

(Perm req)

Credits: 2-3 Grading Method: Regular, Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studio time arranged.

Restricted to departmental honors students only. Prerequisite: permission of department. Students must pay a $40.00 studio lab fee.

Contact department for information to register for this course.

ARTT498I **Directed Studies in Studio Art; Animation, Editing, and Special Effects**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studio time arranged.

Contact department for information to register for this course.

ARTT618 **Drawing; Drawing**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in drawing for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT628 **Painting; Painting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Graduate painting for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT638 **Sculpture; Sculpture**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in sculpture for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT648 **Printmaking; Printmaking**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in printmaking for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT698A **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent work. Meetings with faculty and studio time arranged.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT698B **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent work. Meetings with faculty and studio time arranged.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT698C **Directed Graduate Studies in Studio Art; Graduate Teaching Practicum**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent work. Meetings with faculty and studio time arranged.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT699A **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent graduate studies.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT699B **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent graduate studies.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT718 **Drawing; Drawing**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in drawing for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT728 **Painting; Painting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in painting for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT738 **Sculpture; Sculpture**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in sculpture for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT748 **Printmaking; Printmaking**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in printmaking for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT768 **Graduate Colloquium**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Examines various aspects of art, art theory and criticism in a contemporary and multi-cultural context. Relates student work to this context.

Students must pay a $60.00 laboratory studio fee.

0101	Justin Strom	Seats (Total: 20)
	Th 6:30pm - 9:30pm	ONLINE

ARTT798A **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent graduate studies.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT798B **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent graduate studies.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ASTR Astronomy Fall 2020

ASTR100 **Introduction to Astronomy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS

Credit only granted for: ASTR100, ASTR101, or ASTR120.

An elementary course in descriptive astronomy, especially appropriate for non-science students. Topics include the Sun, Moon, planets, stars, and nebulae, galaxies, and evolution of the Universe.

0101	Lee Mundy TuTh 9:30am - 10:45am M 1:00pm - 1:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0102	Lee Mundy TuTh 9:30am - 10:45am M 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0103	Lee Mundy TuTh 9:30am - 10:45am M 3:00pm - 3:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0104	Lee Mundy TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
0105	Lee Mundy TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
0106	Lee Mundy TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion

FC01	James Hunt	Seats (Total: 30)	
	TuTh 6:00pm - 7:15pm	ONLINE	
	F 1:00pm - 1:50pm	ONLINE	Discussion
	Restricted to students in Freshmen Connection.		

ASTR101 **General Astronomy**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL | General Education: DSNL

Credit only granted for: ASTR100, ASTR101, or ASTR120.

Descriptive astronomy, appropriate for non-science majors. Sun, moon, planets, stars, nebulae, galaxies and evolution. Laboratory exercises include use of photographic material, computer simulations, and standard laboratory equipment.

Discussion sections and lab sections do not meet the first week of classes. Attend lecture before coming to discussion or lab sections. Students must pay a $50.00 Laboratory Materials fee.

0101	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Tu 5:30pm - 7:30pm	ONLINE	Lab
	Tu 3:30pm - 4:20pm	ONLINE	Discussion
0102	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	W 8:30am - 10:30am	ONLINE	Lab
	Tu 3:30pm - 4:20pm	ONLINE	Discussion
0103	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	W 11:00am - 1:00pm	ONLINE	Lab
	W 10:00am - 10:50am	ONLINE	Discussion
0104	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Th 3:30pm - 5:30pm	ONLINE	Lab
	W 10:00am - 10:50am	ONLINE	Discussion
0105	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	W 1:00pm - 3:00pm	ONLINE	Lab
	W 11:00am - 11:50am	ONLINE	Discussion

0106	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Th 8:30am - 10:30am	ONLINE	Lab
	W 11:00am - 11:50am	ONLINE	Discussion
0107	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	W 6:00pm - 8:00pm	ONLINE	Lab
	W 12:00pm - 12:50pm	ONLINE	Discussion
0108	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Th 6:00pm - 8:00pm	ONLINE	Lab
	W 12:00pm - 12:50pm	ONLINE	Discussion
0109	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	F 9:00am - 11:00am	ONLINE	Lab
	W 1:00pm - 1:50pm	ONLINE	Discussion
0110	Alberto Bolatto	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	F 12:00pm - 2:00pm	ONLINE	Lab
	W 1:00pm - 1:50pm	ONLINE	Discussion
FC01	James Hunt	Seats (Total: 13)	
	TuTh 6:00pm - 7:15pm	ONLINE	
	M 6:00pm - 8:00pm	ONLINE	Lab
	F 1:00pm - 1:50pm	ONLINE	Discussion
	Restricted to students in Freshmen Connection.		

ASTR120 **Introductory Astrophysics - Solar System**

Credits: 3 Grading Method: Regular CORE: PS General Education: DSNS

Prerequisite: Must have completed or be concurrently enrolled in MATH140. Restriction: Must not have completed ASTR101 or ASTR100. Credit only granted for: ASTR100, ASTR101, or ASTR120.

For students majoring in astronomy or with a strong interest in science. Topics include development of astronomy, planetary orbits, electromagnetic radiation, telescopes as well as constituents and origin of the solar system (planets, satellites, comets, asteroids, meteoroids, etc.).

0101	Michael Miller TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Michael Miller TuTh 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

ASTR220 **Collisions in Space - The Threat of Asteroid Impacts**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: PS	General Education: DSNS, SCIS

Restriction: Must not be in Astronomy program. Additional information: Course is open to Astronomy and Planetary Sciences minors.

Appropriate for non-science majors. Worried? Can't sleep? Collisions in Space will evaluate the threat of asteroid impacts with the Earth using knowledge of asteroid characteristics and orbits. The merits of possible defense plans will be discussed, as well as the budgetary and political concerns associated with implementing any such plan.

0101	Jessica Sunshine TuTh 2:00pm - 3:15pm W 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Jessica Sunshine TuTh 2:00pm - 3:15pm W 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

ASTR230 **The Science and Fiction of Planetary Systems**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: PS	General Education: DSNS, SCIS

Prerequisite: Must have math eligibility of MATH115 or higher; or MATH113.

Have you ever wondered if humans will ever terraform Mars or Europa so we could live there without a spacesuit? Has it ever crossed your mind how lucky you are that you live on a water-rich planet with an oxygen-rich atmosphere? Have you ever suspected novelists and scriptwriters of creating ridiculous planets that violate scientific laws? Does the fate of our planet's thin biosphere keep you up at night? How common is life in the Universe? These are difficult questions, but armed with the right information, you can answer all of them. The Science and Fiction of Planetary Systems will help you develop a deeper understanding of why planets are the way they are. Along the way, you'll see examples of mistakes made in classic science fiction movies, novels and short stories and get the chance to invent your own plausible planets!

0101	Alan Peel Class time/details on ELMs MWF 12:00pm - 12:50pm	Seats (Total: 36) ONLINE ONLINE	 Discussion
0102	Alan Peel Class time/details on ELMs MWF 1:00pm - 1:50pm	Seats (Total: 36) ONLINE ONLINE	 Discussion
0103	Alan Peel Class time/details on ELMs MWF 2:00pm - 2:50pm	Seats (Total: 36) ONLINE ONLINE	 Discussion

ASTR288 **Special Projects in Astronomy**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Independent study, short research projects, tutorial reading, and assisting with faculty research and teaching under special supervision.

A faculty sponsor must be found by the students prior to enrollment.

Contact department for information to register for this course.

ASTR288I **Special Projects in Astronomy; Introduction to the Astronomy Major**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Independent study, short research projects, tutorial reading, and assisting with faculty research and teaching under special supervision.

Prerequisite: permission of department.

0101	Melissa Hayes-Gehrke, Andrew Harris M 4:00pm - 4:50pm	Seats (Total: 20) ATL 2324
0201	Melissa Hayes-Gehrke, Andrew Harris Tu 4:00pm - 4:50pm	Seats (Total: 20) ATL 2324

ASTR300 **Stars and Stellar Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS

Prerequisite: ASTR100 or ASTR101; and completion of the CORE Distributive Studies requirement in Mathematics and Sciences or General Education Fundamental Studies requirement in Mathematics. Or permission of CMNS-Astronomy department.

Designed primarily for non-science majors. Study of stars-types, properties, evolution, and distribution in space; supernovae, pulsars, and black holes.

0101	A Surjalal Sharma TuTh 2:00pm - 3:15pm	Seats (Total: 50) ONLINE	

ASTR310 **Observational Astronomy**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: ASTR121; and (PHYS171 or PHYS161). Or permission of CMNS-Astronomy department. Restriction: Must be in Astronomy program.

Introduction to current optical observational techniques, with brief coverage of infrared, ultraviolet, and x-ray techniques. Statistics, spherical trigonometry time, catalogs, geometrical and physical optics, telescopes, and optical instruments. Effects of the atmosphere. Practical work at the observatory using a CCD camera. Some nighttime observing sessions.

0101	Melissa Hayes-Gehrke TuTh 2:00pm - 3:15pm M 9:00am - 10:50am	Seats (Total: 10) ATL 2324 ATL 0224	 Lab
0102	Melissa Hayes-Gehrke TuTh 2:00pm - 3:15pm M 1:00pm - 2:50pm	Seats (Total: 10) ATL 2324 ATL 0224	 Lab

ASTR330 **Solar System Astronomy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS

Prerequisite: ASTR100 or ASTR101; and completion of the CORE Distributive Studies requirement in Mathematics and Sciences or the General Education Fundamental Studies requirement in Mathematics. Or permission of CMNS-Astronomy department. Credit only granted for: ASTR330 or GEOL212.

Designed primarily for non-science majors. The structure of planets and of their atmospheres, the nature of comets, asteroids, and satellites. Comparison of various theories for the origin of the solar system. Emphasis on a description of recent data and interpretation.

0101	Douglas Hamilton	Seats (Total: 60)
	TuTh 9:30am - 10:45am	ONLINE

ASTR340 **Origin of the Universe**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS

Prerequisite: ASTR100 or ASTR101; and completion of the CORE Distributive Studies requirement in Mathematics and Sciences or General Education Fundamental Studies requirement in Mathematics. Or permission of CMNS-Astronomy department.

Designed primarily for non-science majors. A study of our progression of knowledge about the universe. Topics include: early cosmological models, geocentric vs. heliocentric theory, curvature of space, Hubble's Law, Big Bang Theory, microwave background radiation, evolution of stars and galaxies, dark matter, active galaxies, quasars and the future of the universe.

0101	Benedikt Diemer	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	ONLINE

ASTR380 **Life in the Universe - Astrobiology**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSNS

Designed primarily for non-science majors. Study of the astronomical perspective on the conditions for the origin and existence of life in the universe.

0101	Richard Mushotzky	Seats (Total: 60)
	TuTh 2:00pm - 3:15pm	ONLINE

ASTR399 **Honors Seminar**

(Perm req)

Credits: 1-16 | Grading Method: Regular, Pass-Fail, Audit

Credit according to work done.

Contact department for information to register for this course.

ASTR406 **Stellar Structure and Evolution**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ASTR320; or permission of CMNS-Astronomy department. Credit only granted for: ASTR 498N or ASTR 406. Formerly: ASTR 498N.

Study of stellar internal structure, nuclear reactions, and energy transport. Study of stellar evolution of both low-mass and high-mass stars, including the stellar end states of white dwarfs, neutron stars, and black holes.

0101	Massimo Ricotti	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ATL 2324

ASTR415 **Computational Astrophysics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ASTR121; and (PHYS271 and PHYS270; or PHYS273). Or permission of CMNS-Astronomy department. Jointly offered with ASTR615. Credit only granted for: ASTR415 or ASTR615.

Introduction to the most important computational techniques being used in research in astrophysics. Topics include modern high performance computer architectures, scientific visualization and data analysis, and detailed descriptions of numerical algorithms for the solution to a wide range of mathematical systems important in astrophysics.

0101	Derek Richardson	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

ASTR498 **Special Problems in Astronomy**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Research or special study. Credit according to work done.

Contact department for information to register for this course.

ASTR601 **Radiative Processes**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of CMNS-Astronomy department.

Emission, absorption, and scattering of radiation by matter, with astrophysical applications. Thermodynamics and statistical mechanics: LTE, Boltzmann, and Saha equations; radiative transfer; atomic and molecular radiation; plasma radiation and transfer: bremsstrahlung, synchrotron emission, Compton scattering.

0101	Eliza Kempton	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	BPS 1243

ASTR615 **Computational Astrophysics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of CMNS-Astronomy department. Jointly offered w ith ASTR415. Credit only granted for: ASTR415 and ASTR615.

Introduction to computational techniques used in astrophysical research. Topics include modern high performance computer architectures, scientific visualization and data analysis, and detailed descriptions of numerical algorithms for the solution to a wide range of mathematical systems important in astrophysics.

0101	Derek Richardson	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	ONLINE

ASTR688B **Special Topics in Modern Astronomy; Current Astronomy Research**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Special topics such as extragalactic radio sources, plasma astrophysics, the H.R. diagram, chemistry of the interstellar medium, radiophysics of the sun.

0101	Andrew Harris	Seats (Total: 30)
	W 3:30pm - 5:30pm	ONLINE

ASTR695 **Introduction to Research**

Credits: 1 Grading Method: Sat-Fail

Provides an introduction to research programs in the Department of Astronomy and a forum to explore possible research projects. Aimed at incoming graduate students.

0101	Michael Miller	Seats (Total: 20)
	M 5:00pm - 5:50pm	ATL 2324

ASTR699 **Special Problems in Advanced Astronomy**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ASTR799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ASTR898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Sat-Fail

Contact department for information to register for this course.

ASTR899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BCHM Biochemistry Fall 2020

The College of Computer, Mathematical and Natural Sciences enforces course prerequisites. Students who do not meet the course prerequisites will be administratively dropped from the course. Registration in course sections which begin with "SEF" are restricted to Post-Baccalaureate students who enroll through the Science in the Evening Program in the College of Computer, Mathematical and Natural Sciences. Please note that this class is charged at the regular part-time tuition rate (on a per credit basis), even for full- time students. To register or to learn more about the Science in the Evening program, you must contact the Life Sciences Outreach and Special Programs Office at (301) 405-6892.*

BCHM461 **Biochemistry I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM271 and CHEM272; or minimum grade of C- in CHEM276 and CHEM277. Credit only granted for: BCHM461 or BCHM463.

First semester of a comprehensive introduction to modern biochemistry. Structure, chemical properties, and function of proteins and enzymes, carbohydrates, lipids, and nucleic acids. Basic enzyme kinetics and catalytic mechanisms.

0101	Dorothy Beckett TuTh 9:30am - 10:45am	Seats (Total: 125) ONLINE
0102	Paul Paukstelis MW 4:00pm - 5:15pm	Seats (Total: 125) ONLINE
0103	Paul Paukstelis TuTh 12:30pm - 1:45pm	Seats (Total: 125) ONLINE

BCHM462 **Biochemistry II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BCHM461. Credit only granted for: BCHM462 or BCHM463.

A continuation of BCHM 461. Metabolic pathways and metabolic regulation, energy transduction in biological systems, enzyme catalytic mechanisms.

0102	Douglas Julin MWF 11:00am - 11:50am	Seats (Total: 100) ONLINE

BCHM463 **Biochemistry of Physiology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in CHEM271 and CHEM272; or minimum grade of C- in CHEM276 and CHEM277. Credit only granted for: BCHM461, BCHM462 or BCHM463.

A one-semester introduction to general biochemistry. A study of protein structure, enzyme catalysis, metabolism, and metabolic regulation with respect to their relationship to physiology.

0101	Nicole LaRonde TuTh 11:00am - 12:15pm	Seats (Total: 125) ONLINE
0103	Nicole LaRonde MWF 12:00pm - 12:50pm	Seats (Total: 125) ONLINE
ESG1	Peter Ziniel MWF 11:00am - 11:50am *Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci-reg@umd.edu for permission.*	Seats (Total: 50) ONLINE
PDS1	Bonnie Dixon M 6:30pm - 9:30pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 40) ONLINE

BCHM464 **Biochemistry Laboratory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BCHM461 or BCHM463; and a grade of C- or better in the prerequisite is required for all College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: BCHM465. Restriction: BCHM, CHEM, and Nutritional Sciences majors have first priority, followed by other life science majors.

Biochemical and genetic methods for studying protein function. Site-directed mutagenesis and molecular cloning, protein purification, enzyme activity assays, computer modeling of protein structure.

Students must pay a $40.00 laboratory materials fee.

0101	Christopher Capp Tu 12:30pm - 1:20pm Class time/details on ELMs Th 12:30pm - 5:30pm	Seats (Total: 18) ONLINE ONLINE ESJ 0316	 Lab
0102	Christopher Capp Tu 12:30pm - 1:20pm Class time/details on ELMs W 12:00pm - 5:00pm	Seats (Total: 18) ONLINE ONLINE ESJ 0316	 Lab

BCHM465 **Biochemistry III**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: CS

Prerequisite: BCHM461 or BCHM463; and a grade of C- or better in the prerequisite is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Recommended: BCHM462.

CORE Capstone (CS) Course. An advanced course in biochemistry. Biochemical approach to cellular information processing. DNA and RNA structure. DNA replication, transcription, and repair. Translation of mRNA to make proteins.

0101	Theodore Dayie TuTh 8:00am - 9:15am	Seats (Total: 80) ONLINE	

BCHM661 **Nucleic Acids I**

Credits: 2 | Grading Method: Regular, Audit

Prerequisite: BSCI410 and BCHM465.

Topics covered: Chemistry and structure of DNA and RNA, from nucleotides to chromatin, chromosomes, and genomes, and some methods for studying, synthesizing, sequencing and manipulating nucleic acids. Rudimentary genomics and bioinformatics. DNA Biology: selected aspects of the biochemistry and regulation of DNA replication, repair, and recombination, and how these processes interact with each other.

0101	Jason Kahn **Meets August 31, 2020 - October 16, 2020** MWF 9:30am - 10:50am	Seats (Total: 30) PHY 1410

BCHM662 **Nucleic Acids II**

Credits: 2 Grading Method: Regular, Audit

Prerequisite: BCHM661.

Topics covered: Interactions between nucleic acids and ligands such as cations, drugs, and especially proteins. Sources of binding affinity and specificity. Selection-amplification methods. Description of several classes of protein-nucleic acids complexes. DNA/RNA catalysis, the origin of life, mobile genetic elements.

0101	Jason Kahn **Meets October 19, 2020 - December 14, 2020** MWF 9:30am - 10:50am	Seats (Total: 30) PHY 1410

BCHM669E **Special Topics in Biochemistry; Bio NMR: Theories and Applications**

Credits: 3 Grading Method: Regular, Audit

Prerequisites: Calculus, undergraduate level biochemistry, and physical chemistry. Introduction to modern biomolecular NMR and applications to biological problems, including structure, dynamics and interactions of biological macromolecules. The course covers fundamentals of NMR, including quantum-mechanical treatment, vector models, and product operator formalism.

0101	David Fushman MW 11:00am - 12:15pm	Seats (Total: 13) BSB 2118

BCHM671 **Protein Chemistry and Enzymic Catalysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BCHM461; or students who have taken courses with comparable content may contact the department.

Principles of protein structure, folding, and function, experimental characterization of structure, active sites, enzyme mechanisms and kinetics.

0101	Jinwoo Lee	Seats (Total: 35)
	TuTh 9:30am - 10:50am	BRB 1101

BCHM698 **Literature Seminar in Biochemistry**

Credits: 2 Grading Method: Regular

Students will prepare and present a departmental seminar based on a topic in the current biochemical research literature.

0101	Jason Kahn	Seats (Total: 10)
	Contact instructor or department for details.	

BCHM699 **Special Problems in Biochemistry**

Credits: 1-6 Grading Method: Regular, Audit

Laboratory experience in a research environment. Restricted to students in the non-thesis M.S. option.

Open only to non-thesis M.S. degree candidates.

Contact department for information to register for this course.

BCHM799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BCHM889A **Seminar; Biochemistry**

Credits: 1 Grading Method: Regular, Audit

0101	Theodore Dayie	Seats (Total: 18)
	Tu 11:00am - 11:50am	CHM 0112

BCHM889C **Seminar; Allostery in DNA Binding**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

0101	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	

BCHM889D **Seminar; Enzymology Recombination**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

0101	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	

BCHM889F **Seminar; Antimicrobial Peptides**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

0101	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	

BCHM889J **Seminar; Nucleic Acid Structures**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

0101	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	

BCHM889M **Seminar; Modern Methods in NMR and Structural Biology**

Credits: 1-3

Grading Method: Regular, Audit

0101	Instructor: TBA	Seats (Total: 40)
	Contact instructor or department for details.	

BCHM889P **Seminar; Structure and Reactivity of Biopolymers**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

0101	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	

BCHM898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

BCHM899 **Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BIOE Bioengineering Fall 2020

BIOE120 **Biology for Engineers**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in MATH140. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Introduction to the functions and interactions of biological systems from a quantitative perspective. Introduction to the modern experimental techniques and methods of data analysis. Roles for bioengineers in biology, and the role of biology in bioengineering will be elucidated.

Students will be introduced to the functions and interactions of biological systems from a quantitative perspective. They will also be encourage d to solve problems through active inquiry, critical analysis,and creat ivity. Finally, roles for bioengineers in biology, and the role of biology in bioengineering will be elucidated.

0101	Angela Jones	Seats (Total: 50)	
	MWF 12:00pm - 12:50pm	ONLINE	
	Th 5:00pm - 5:50pm	ONLINE	Discussion
0201	Angela Jones	Seats (Total: 50)	
	MWF 1:00pm - 1:50pm	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion

BIOE121 **Biology for Engineers Laboratory**

(Perm req) Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in BIOE120. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Bioengineering encompasses numerous sub-disciplines that apply engineering principles to analyze biological systems and that utilize engineering design strategies to solve biological and biomedical problems. This course is aimed at providing students with the opportunity to learn how biology and engineering can synergistically contribute to our understanding of such problems, and to gain hands-on experience in basic techniques relevant to Bioengineering.

0101	Angela Jones	Seats (Total: 10)	
	M 4:00pm - 4:50pm	ONLINE	
	W 9:00am - 11:00am	AJC 1121	Lab

0102	Angela Jones M 4:00pm - 4:50pm W 3:00pm - 5:00pm	Seats (Total: 10) ONLINE AJC 1121	Lab
0103	Angela Jones M 4:00pm - 4:50pm Th 9:30am - 11:30am	Seats (Total: 10) ONLINE AJC 1121	Lab
0104	Angela Jones M 4:00pm - 4:50pm Th 2:00pm - 4:00pm	Seats (Total: 10) ONLINE AJC 1121	Lab
0202	Brian Blair M 4:00pm - 4:50pm Tu 12:00pm - 2:00pm	Seats (Total: 8) ONLINE AJC 1121	Lab

BIOE221 **Academic and Career Planning**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: BIOE120 and BIOE121. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Provides practical tools to help Bioengineering majors think critically about their goals and career paths. Guides Bioengineering students through accessing useful resources both on- and off-campus.

0101	Bill Churma Class time/details on ELMs	Seats (Total: 30) ONLINE
0201	Abby Shantzis Class time/details on ELMs	Seats (Total: 30) ONLINE

BIOE232 **Bioengineering Thermodynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS261 and PHYS260. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE232, ENES232, ENME232, or ENME320.

A quantitative introduction to thermodynamic analysis of bioengineering systems. Bioengineering encompasses a wide range of applications from nanoscale interactions (e.g. reactions between molecules), to cellular interactions (e.g. membrane electrical currents), to overall balances on organisms, all the way to large scale manufacturing. Each of these applications (and many others not mentioned) involve energy interactions which is the domain of thermodynamics. The basic laws of thermodynamics will be introduced and explained through a series of examples related to bioengineering systems.

0101	Jose Aranda-Espinoza TuTh 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Jose Aranda-Espinoza TuTh 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

BIOE241 **Biocomputational Methods**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Application of computer technology to biological and natural resource systems considering engineering aspects. Designed to help students in the use of computer technology for problem solving. The course will cover 4-5 software packages important for later use by the student.

0101	Hubert Montas MWF 3:00pm - 3:50pm	Seats (Total: 35) KEB 2107
0201	Hubert Montas MWF 5:00pm - 5:50pm	Seats (Total: 35) KEB 2111

BIOE331 **Biofluids**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: MATH246, BIOE120, BIOE121, BIOE241, and BIOE371; and must have completed or be concurrently enrolled in BIOE232. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE331, ENCE305, ENFP300 or ENME331.

Principles and applications of fluid mechanics with a focus on bioengineering topics. Content includes conservation of mass, momentum, and energy, as well as the application of these fundamental relations to hydrostatics, control volume analysis, internal and external flow, and boundary layers. Applications to biological and bioengineering problems such as tissue engineering, bioprocessing, imaging, and drug delivery.

0101	Gregg Duncan	Seats (Total: 35)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	F 1:00pm - 2:50pm	ONLINE	Discussion
0102	Gregg Duncan	Seats (Total: 35)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	F 3:00pm - 4:50pm	ONLINE	Discussion

BIOE340 **Modeling Physiological Systems and Lab**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330, BIOE120, BIOE121, BIOE241, and MATH246. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE340 or (BSCI440 and BSCI441).

Topics covered will include cell and general physiology, membrane physiology, blood cells and clotting, circulation, metabolism, respiration, and the nervous system. A lab component will also be included.

0101	John Fisher	Seats (Total: 30)	
	TuTh 3:30pm - 4:45pm	ONLINE	
	Th 5:00pm - 6:30pm	ONLINE	Lab
	Tu 5:00pm - 5:50pm	ONLINE	Discussion
	Lab will meet in either KEB2107 or KEB2111.		
0102	John Fisher	Seats (Total: 30)	
	TuTh 3:30pm - 4:45pm	ONLINE	
	Th 5:00pm - 6:30pm	ONLINE	Lab
	W 9:00am - 9:50am	ONLINE	Discussion

BIOE371 **Linear Systems and Ordinary Differential Equations for Bioengineering Applications**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BIOE241; and must have completed or be concurrently enrolled in MATH246. Restriction: Permission on ENGR-Fischell Department of Bioengineering department.

This class utilizes fundamentals in linear systems, including eigenvalues and eigenvectors, as well as linear differential equations, to study various problems in bioengineering and biological systems, with a particular emphasis on feedback, stability, controllability, and control design.

0101	Lan Ma MWF 11:00am - 11:50am F 9:00am - 9:50am	Seats (Total: 40) ONLINE IRB 1116	 Discussion
0102	Lan Ma MWF 11:00am - 11:50am F 3:00pm - 3:50pm	Seats (Total: 40) ONLINE IRB 1116	 Discussion

BIOE372 **Biostatistics for Experimental Design and Data Analysis**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: BIOE120, BIOE121, and BIOE241. Recommended: MATH246. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE372 or STAT464.

This course will instruct students in the fundamentals of probability and statistics through examples in biological phenomenon, the design of bioengineering experiments, and clinical data analysis. Fundamentals covered in the course include probability distributions, hypothesis testing, power analysis, regression analysis, and correlation analysis.

0101	Giuliano Scarcelli TuTh 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 30) ONLINE ATL 2324	 Discussion
0102	Giuliano Scarcelli TuTh 12:30pm - 1:45pm F 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ATL 2324	 Discussion

BIOE399 **Independent Study in Bioengineering**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent study.

Prerequisite: permission of department.

Contact department for information to register for this course.

BIOE399H **Independent Study in Bioengineering**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Independent study.

Contact department for information to register for this course.

BIOE404 **Biomechanics**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246, BIOE120, ENES102, BIOE121, and BIOE241; and must have completed or be concurrently enrolled in BIOE371. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Introduction to the fundamentals of biomechanics including force analysis, mechanics of deformable bodies, stress and strain, multiaxial deformations, stress analysis, and viscoelasticity. Biomechanics of soft and hard tissues.

0101	Kimberly Stroka TuTh 11:00am - 12:15pm W 9:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Kimberly Stroka TuTh 11:00am - 12:15pm W 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion

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BIOE420 **Bioimaging**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246, BIOE120, BIOE121, and BIOE241. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Examines the physical principles behind major biomedical imaging modalities and new ways of using images for bio-related applications.

0101	Yang Tao TuTh 9:30am - 10:45am Tu 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Yang Tao TuTh 9:30am - 10:45am W 4:00pm - 4:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

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BIOE437 **Computer-Aided Design in Bioengineering**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: BIOE120, BIOE121, BIOE241, and MATH246; or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE437, BIOE689V, ENME414, ENME272, or ENAE488D. Formerly: BIOE689V.

Introduction to Computer-Aided Design (CAD). Basic CAD operations will be demonstrated in class with Creo Parametric (formerly Pro/E). Lecture topics will summarize design methodology, review best-practices in hardware development, and discuss engineering applications. The course will culminate in a student-selected project leveraging CAD.

0101	Milton Davis	Seats (Total: 40)
	Tu 5:00pm - 7:45pm	ONLINE

BIOE442 **Python: Introduction to Programming and Data Analysis**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BIOE241, BIOE120, BIOE121, and MATH241; or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE489A or BIOE442. Formerly: BIOE489A.

Provides an introduction to structured programming, computational methods, and data analysis techniques with the goal of building a foundation allowing students to confidently address problems in research and industry. Fundamentals of programming, algorithms, and simulation are covered from a general computer science perspective, while the applied data analysis and visualization portion makes use of the Python SciPy stack.

0101	Jonathan Resop	Seats (Total: 30)
	MW 4:00pm - 4:50pm	ONLINE
	Class time/details on ELMs	ONLINE

BIOE453 **Biomaterials**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM231, MATH246, CHEM232, BIOE120, BIOE121, and BIOE241. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE453, CHBE457, or ENMA425.

Examination of the structure and function of natural biomaterials, and cell-extracellular matrix interactions. Study physical properties of synthetic biomaterials for biomedical applications. Understanding molecular level interactions between biomolecules and biomaterials to design novel biomaterials with desirable characteristics. Application of biomaterials as implants, drug delivery systems, biosensors, engineered materials such as artificial skin and bone growth scaffolds will be covered.

0101	Xiaoming He	Seats (Total: 30)	
	MWF 12:00pm - 12:50pm M 11:00am - 11:50am	ONLINE ONLINE	Discussion
0102	Xiaoming He	Seats (Total: 30)	
	MWF 12:00pm - 12:50pm M 1:00pm - 1:50pm	ONLINE ONLINE	Discussion

BIOE457 **Biomedical Electronics & Instrumentation**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BIOE120, BIOE121, BIOE241, PHYS261, MATH246, and PHYS260. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Students learn fundamental concepts of electronics, assembly of electronic components into functional circuits, and integration of functional electronic devices and circuits into a system. In the lab component, students will learn to assemble and evaluate circuits and systems.

0101	Ian White	Seats (Total: 30)	
	MWF 10:00am - 10:50am W 12:00pm - 1:50pm	ONLINE AJC 1120	Lab
0102	Ian White	Seats (Total: 30)	
	MWF 10:00am - 10:50am W 3:30pm - 5:20pm	ONLINE AJC 1120	Lab

BIOE464 **Introduction to Computational Molecular Bioengineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BIOE120, BIOE241, MATH246, BIOE232, and BIOE372; or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE489N or BIOE464. Formerly: BIOE489N.

Designed to introduce students to the principles, methods, and software used for simulation and modeling of macromolecules of biological interest such as proteins, lipids, and polysaccharides. Along with experiment and theory, computational modeling provides new tools for analysis, explanation and prediction. The course is also useful for students who plan to use experimental techniques as their primary approach, but who will employ computational modeling as a tool to obtain integrative understanding of complex systems. Finally, the course should be valuable as an introductory overview for students planning to conduct their thesis research in computational modeling of biological systems. Class topics: Basic statistical thermodynamics, Force fields, Molecular dynamics/ monte carlo methods, Conformational analysis, Fluctuations & transport properties, Free-energy calculations, Multiscale modeling.

0101	Silvina Matysiak	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

BIOE485 **Capstone Design I: Entrepreneurship, Regulatory Issues, and Ethics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 21 credits in BIOE courses. Restriction: Permission of ENGR-Fischell Department of Bioengineering department; and senior standing; and must be in Engineering: Bioengineering program. Credit only granted for: BIOE485 or ENBE485. Formerly: ENBE485.

This is the first part of a two-semester senior capstone design course which covers principles involved in engineering design, design approaches, economics of design, ethics in engineering, and patent regulations. It also helps students learn team work and write design project proposals under the mentorship of a faculty advisor.

A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE): http://ter.ps/iamFEARLESS Click here for more information on the Fearless Ideas Courses.

0101	Yang Tao	Seats (Total: 130)
	MW 2:00pm - 3:15pm	ONLINE

BIOE489C **Special Topics in Bioengineering; Mechanical Design of Medical Devices**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prerequisite: BIOE120, BIOE121, BIOE241, BIOE437. Restriction: Permission of department.

0101	Frank Modica	Seats (Total: 20)
	W 6:00pm - 9:00pm	KEB 2111

BIOE489G **Special Topics in Bioengineering; Immunoengineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prereqs: BIOE120, BIOE121, BIOE241, and MATH246 or Permission of the Fischell Department of Bioengineering Immunoengineering harnesses immunological functions to design treatments for various diseases including cancer. We will explore how engineering technologies have been used to study and modulate immune functions, techniques used in immunology and immune engineering, and new developments in the field. The course will largely focus on current literature in immune engineering topics.

0101	Katharina Maisel	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ONLINE

BIOE489H **Special Topics in Bioengineering; Bioengineering Honors Seminar**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Restricted to students in the BIOE Honors Proram.

0101	Kimberly Stroka	Seats (Total: 20)
	M 3:15pm - 4:15pm	ONLINE

BIOE489R **Special Topics in Bioengineering; Protein Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prerequisite: BIOE120 and BIOE232. Credit only granted for: CHBE497, BIOE489R, or ENCH648P.

0101	Amy Karlsson	Seats (Total: 15)
	MW 9:00am - 10:15am	ONLINE

BIOE489U **Special Topics in Bioengineering; Medical Device Development and the Regulatory Process**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prerequisites: BIOE120, BIOE121, BIOE241, and MATH246 Provides an overview of the commercial development pathways for both pharmaceuticals and medical devices, from inception to market. Class topics will include identifying technological needs, concept generation and invention, intellectual protection, licensing, risk management, preclinical, clinical, good manufacturing practices, global regulatory issues, marketing factors, and post marketing surveillance which influence discovery and development of new medical products.

0101	Esmaiel Jabbari	Seats (Total: 20)
	MWF 10:00am - 10:50am	EGR 0108

BIOE489V **Special Topics in Bioengineering; Cardiovascular Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prereqs: BIOE120, BIOE241, MATH246, BIOE331, BIOE340. An overview of engineering applications in the cardiovascular system. Covers cardiovascular anatomy, physiology and pathophysiology in the context of cell and tissue mechanics, fluid mechanics, thermodynamics, biotransport, neurovascular coupling, and imaging. Includes design of cardiovascular devices, sensors, biomaterials, and tissue engineered constructs.

0101	Alisa Clyne	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

BIOE489W **Special Topics in Bioengineering; Advanced Biomaterials**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prereq: BIOE453 or Permission of the Fischell Department of Bioengineering.

0101	Xiaoming He	Seats (Total: 10)
	M 4:00pm - 6:35pm	CSI 1121

BIOE489Y **Special Topics in Bioengineering; Engineering Design for Global Health**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prerequisites: BIOE120, BIOE121, BIOE241, and MATH246 Many medical technologies are not available in low and middle-income countries due to the cost, infrastructure, and medical expertise required to implement and sustain them. There is tremendous potential to increase access to health care through developing more affordable biomedical technologies, but effective design requires deep understanding of the problem. This course will introduce the human-centered design framework and how it can be applied to design new biomedical technologies to solve challenges in global health.

0101	Jenna Mueller	Seats (Total: 12)	
	TuTh 12:30pm - 1:45pm	ONLINE	

BIOE601 **Biomolecular and Cellular Rate Processes**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE601 or ENCH859B.

Presentation of techniques for characterizing and manipulating non-linear biochemical reaction networks. Advanced topics to include mathematical modeling of the dynamics of biological systems; separation techniques for heat sensitive biologically active materials; and rate processes in cellular and biomolecular systems. Methods are applied to current biotechnological systems, some include: recombinant bacteria; plant insect and mammalian cells; and transformed cell lines.

0101	William Bentley	Seats (Total: 30)	
	TuTh 9:30am - 10:45am	PHY 1412	

BIOE605 **BIOE Graduate Studies I**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Must be in ENGR: PhD Only-Bioengineering (Doctoral) program.

Introduction to the bioengineering graduate program. Students gain exposure to departmental research through lab rotation and to current research in the field through seminar. Students will also gain preparation and guidance on other first-year academic requirements.

0101	Jose Aranda-Espinoza	Seats (Total: 30)	
	F 10:00am - 10:50am	EGR 1202	
	F 9:00am - 9:50am	EGR 1202	Discussion

BIOE608 **Bioengineering Seminar Series**

(Perm req)

Credits: 1 Grading Method: Sat-Fail, Audit

A variety of topics related to Bioengineering will be presented in weekly seminars.

For BIOE majors only.

0101	Steven Jay F 9:00am - 9:50am	Seats (Total: 40) ONLINE

BIOE612 **Physiological Evaluation of Bioengineering Designs**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Bioengineering designs of biomaterials, biomedical devices, imaging and drug delivery agents, tissue engineering, prosthesis (among others), offer the opportunity to improve health care. This course is aimed at providing knowledge to lead bioengineering designs on the basis of biocompatibility and to provide tools to assess their patho-physiological impact in biological systems.

0101	Huang Chiao Huang TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE

BIOE658G **Special Topics in Bioengineering (M.Eng.); Genome Editing & Synthetic Biology**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Special topics in Bioengineering.

For Master of Engineering students only or with permission of department The course will introduce students to the field of genome editing and synthetic biology. After reviewing basic molecular biology concepts necessary to engage with the material, the course will explore the relevant cutting edge technologies via in-depth analysis of scientific papers, both historically important and recent landmark reports.

0201	Jarred Callura Class time/details on ELMs	Seats (Total: 20) ONLINE

BIOE658M **Special Topics in Bioengineering (M.Eng.); Applied Mathematics in Bioengineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Special topics in Bioengineering.

For Master of Engineering students only or with permission of department Solving bioengineering problems by using a variety of mathematical topics such as ordinary and partial differential equations, linear algebra, modeling, and statistics.

0201	Angela Jones	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

BIOE658N **Special Topics in Bioengineering (M.Eng.); Advanced Experiences in Bioengineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Special topics in Bioengineering.

For Master of Engineering students only or with permission of department. Students that have already identified professional contacts that will support them during this experiential co-op opportunity will need to apply for this course directly through the instructor.

0101	Angela Jones	Seats (Total: 5)
	Class time/details on ELMs	ONLINE
	For Master of Engineering students only or with permission of department Students that have already identified professional contacts that will support them during this experiential co-op opportunity will need to apply for this course directly through the instructor.	

BIOE658R **Special Topics in Bioengineering (M.Eng.); Regulatory Affairs in Medical Product Development**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Special topics in Bioengineering.

For Master of Engineering students only or with permission of department. Credit will only be granted for ANTH627 or BIOE658R. An introductory course on regulations associated with the development and production of medical devices and pharmaceuticals.

0201	Valerie Merkle	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

BIOE689 **Special Topics in Bioengineering**

Credits: 1-3 Grading Method: Regular

Research Oriented Individual Instruction course.

Contact department for information to register for this course.

BIOE689G **Special Topics in Bioengineering; Advanced Immunoengineering**

(Perm req)

Credits: 3 Grading Method: Regular

Research Oriented Individual Instruction course.

Immunoengineering harnesses immunological functions to design treatments for various diseases including cancer. We will explore how engineering technologies have been used to study and modulate immune functions, techniques used in immunology and immune engineering, and new developments in the field. The course will largely focus on current literature in immune engineering topics.

0101	Katharina Maisel	Seats (Total: 15)
	TuTh 3:30pm - 4:45pm	ONLINE

BIOE689K **Special Topics in Bioengineering; Cardiovascular Engineering**

(Perm req)

Credits: 3 Grading Method: Regular

Research Oriented Individual Instruction course.

An overview of engineering applications in the cardiovascular system. Covers cardiovascular anatomy, physiology and pathophysiology in the context of cell and tissue mechanics, fluid mechanics, thermodynamics, biotransport, neurovascular coupling, and imaging. Includes design of cardiovascular devices, sensors, biomaterials, and tissue engineered constructs.

0101	Alisa Clyne	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	ONLINE

BIOE799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BIOE898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

BIOE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BIOL Biology Fall 2020

BIOL608A **Biology Seminar; Writing an NSF Fellowship Proposal**

(Perm req)

Credits: 1 Grading Method: Regular

0101	Karen Carleton	Seats (Total: 10)
	Meets August 31, 2020 - October 16, 2020	
	W 4:30pm - 6:30pm	ONLINE

BIOL608E **Biology Seminar; Community Ecology: Foundations and Frontiers**

Credits: 1 Grading Method: Regular

0101	Nathan Swenson	Seats (Total: 15)
	M 10:00am - 11:00am	ONLINE

BIOL608K **Biology Seminar; Biological Sciences Teaching and Learning in Higher Education**

(Perm req)

Credits: 2 Grading Method: Regular

Cross-listed with CBMG699K, CHEM608K, and ENTM699K. Credit will be grant edfor only one of the following: BIOL608K, CBMG699K, CHEM608K, or ENTM699K.

0101	Gili Ad-Marbach	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

BIOL608N **Biology Seminar; SPECIATION**

Credits: 2 Grading Method: Regular

0101	Carlos Machado	Seats (Total: 10)
	F 10:00am - 11:50am	ONLINE

BIOL609 **Special Problems in Biology**

Credits: 1-6 Grading Method: Regular

One seminar per week for each subject selected: A-Cell Biology; B-Developmental Biology; C-Estuarine and Marine Biology; D-Genetics; E-Parasitology; F-Physiology; G-Systematics and Evolutionary Biology; I-Behavior; J-General; K-Endocrinology; L-Ecology.

Contact department for information to register for this course.

BIOL671 **Molecular Evolution**

Credits: 3 Grading Method: Regular

Credit only granted for: BIOL671 or ZOOL645. Formerly: ZOOL645.

Basic foundations through advanced concepts in molecular evolution, including patterns and processes of DNA sequence variation, transposable element dynamics, gene duplication and loss, and genome organization. Relevant concepts from genetics, biochemistry, and phylogenetics also will be covered.

0101	Michael Cummings	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

BIOL704 **Cell Biology from a Biophysical Perspective**

Credits: 3 Grading Method: Regular

Recommended: BSCI330, PHYS121, and PHYS122. Jointly offered with BSCI40 4. Credit only granted for: BSCI404, BIOL704, BIOL708O, or BIPH704. Formerly: BIOL708O.

An approach to cell biology by focusing on mechanisms and unifying paradigms. It will not assume a great deal of factual biological knowledge, but will expect a background that prepares students to think quantitatively and mechanistically.

0101	Sergei Sukharev	Seats (Total: 19)
	Class time/details on ELMs	ONLINE

BIOL708E **Advanced Topics in Biology; Diseases of the Nervous System**

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in various zoological subjects.

0101	Quentin Gaudry	Seats (Total: 8)
	TuTh 11:00am - 12:15pm	ONLINE

BIOL708Q **Advanced Topics in Biology; Neurobiology of Chemosensory Systems**

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in various zoological subjects.

0101	Ricardo Araneda	Seats (Total: 7)
	MW 2:00pm - 3:15pm	BPS 1250

BIOL708X **Advanced Topics in Biology; Sexual Selection in Nature**

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in various zoological subjects.

0101	Heidi Fisher	Seats (Total: 7)
	TuTh 12:30pm - 1:45pm	ONLINE

BIOL709C **Selected Advanced Topics in Biology; Population and Evolutionary Genetics**

Credits: 3 Grading Method: Regular, Audit

Lectures, experimental courses and other special instructions in various biological subjects.

0101	Philip Johnson	Seats (Total: 4)	
	MW 11:00am - 11:50am	ONLINE	
	F 11:00am - 12:50pm	ONLINE	Lab

BIOL709W **Selected Advanced Topics in Biology; Molecular Neuroethology**

Credits: 3 Grading Method: Regular, Audit

Lectures, experimental courses and other special instructions in various biological subjects.

0101	Scott Juntti	Seats (Total: 10)
	TuTh 3:30pm - 4:45pm	ONLINE

BIOL799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BIOL898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

BIOL899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BIOM301 **Introduction to Biometrics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSAR

Prerequisite: MATH113 or MATH115. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201.

Descriptive statistics, introduction to probability, sampling, confidence interval estimation, hypothesis testing, simple regression and correlation. Emphasis on simple applications of statistical techniques and interpretation of statistical results.

0101	Christine Hakenkamp TuTh 2:00pm - 2:50pm M 1:00pm - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Discussion
0102	Christine Hakenkamp TuTh 2:00pm - 2:50pm M 2:00pm - 2:50pm	Seats (Total: 26) ONLINE ONLINE	 Discussion
0103	Christine Hakenkamp TuTh 2:00pm - 2:50pm M 3:00pm - 3:50pm	Seats (Total: 26) ONLINE ONLINE	 Discussion
0104	Christine Hakenkamp TuTh 2:00pm - 2:50pm Tu 9:30am - 10:20am	Seats (Total: 26) ONLINE ONLINE	 Discussion
0105	Christine Hakenkamp TuTh 2:00pm - 2:50pm Tu 11:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	 Discussion
0106	Christine Hakenkamp TuTh 2:00pm - 2:50pm Tu 12:30pm - 1:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0107	Christine Hakenkamp TuTh 2:00pm - 2:50pm M 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

BIOM405 **Computer Applications in Biometrics**

(Perm req)

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

An introduction to computer applications for data analysis. This is equivalent to the computer lab of 601 and is required for students that have taken BIOM 301 and BIOM402 and wish to go directly into BIOM602.

0101	Li Ma	Seats (Total: 5)	
	Class time/details on ELMs	ONLINE	

BIOM601 **Biostatistics I**

Credits: 4 Grading Method: Regular, Audit

Prerequisite: BIOM301 or STAT464; or students who have taken courses with comparable content may contact the department. Credit only granted for: BIOM401 or BIOM601.

Estimation and hypothesis testing, t tests, one and two way analysis of variance, regression, analysis of frequency data. Lecture will emphasize uses and limitations of these methods in biology, while the laboratory will emphasize the use of statistical analysis software for the analysis of biological data.

0101	Li Ma	Seats (Total: 27)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	Tu 2:00pm - 4:00pm	ONLINE	Lab
0102	Li Ma	Seats (Total: 27)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	W 9:00am - 11:00am	ONLINE	Lab
0104	Li Ma	Seats (Total: 27)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	Th 2:00pm - 4:00pm	ONLINE	Lab

BIOM603 **Biostatistics III**

Credits: 4 Grading Method: Regular, Audit

Prerequisite: Must have completed a graduate-level statistical class; or students who have taken courses with comparable content may contact the department.

Applications and implementation of linear model analysis to biological data, including multivariate regression model, mixed model, generalized linear mixed model, nonlinear logistic and Poisson regression models, power calculation and survival analysis.

0101	Jiuzhou Song	Seats (Total: 10)	
	MW 9:00am - 10:15am	ONLINE	
	Th 9:00am - 10:50am	ONLINE	Lab

BIOM688A **Topics in Biometrics; Consulting Experience in Biometrics**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest in various areas of biometrics. Credit assigned will depend on lecture and/or laboratory time scheduled and organization of the course.

Contact department for information to register for this course.

BIOM698 **Special Problems in Biometrics**

Credits: 1-3 Grading Method: Regular, Audit

Individual study of a particular topic in biostatistics or biomathematics.

Contact department for information to register for this course.

BIPH Biophysics Fall 2020

BIPH698L **Biophysics Seminar; Biophysics**

Credits: 1 Grading Method: Regular, Audit

0101	Arpita Upadhyaya	Seats (Total: 20)
	M 4:00pm - 5:30pm	ONLINE

BIPH699 **Research in Biophysics**

Credits: 2 Grading Method: Regular

Supervised research in biophysics laboratories. Rotations through several laboratories prior to a choice of laboratory for a research assistantship.

Contact department for information to register for this course.

BIPH704 **Cell Biology from a Biophysical Perspective**

Credits: 3 Grading Method: Regular

Recommended: BSCI330, PHYS121, and PHYS122. Jointly offered with BSCI40 4, BIOL704. Credit only granted for: BSCI404, BIOL704, BIOL708O, or BIPH704.

An approach to cell biology by focusing on mechanisms and unifying paradigms. It will not assume a great deal of factual biological knowledge, but will expect a background that prepares students to think quantitatively and mechanistically.

0101	Sergei Sukharev	Seats (Total: 19)
	Class time/details on ELMs	ONLINE

BIPH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

BIPH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BISI Biological Sciences Fall 2020

BISI678B **Rotations in Biological Sciences; Rotations in BEES**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Karen Carleton	Seats (Total: 5)
	Contact instructor or department for details.	

BISI678C **Rotations in Biological Sciences; Rotations in CBBG**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Stephen Mount	Seats (Total: 5)
	Contact instructor or department for details.	

BISI678D **Rotations in Biological Sciences; Program Director Rotations**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Eric Haag	Seats (Total: 5)
	Contact instructor or department for details.	

BISI678P **Rotations in Biological Sciences; Rotations in PSYS**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Ricardo Araneda	Seats (Total: 5)
	Contact instructor or department for details.	

BISI678Z **Rotations in Biological Sciences; Rotations**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Michael Cummings	Seats (Total: 5)
	Contact instructor or department for details.	

BISI701 **Teaching & Professional Development in Biology**

Credits: 1 Grading Method: Sat-Fail

Cross-listed with ENTM701. Credit only granted for: ENTM701, BISI688Z, CBMG688Z, or BIOL701. Formerly: BISI688Z, CBMG688Z, BIOL701. Additional information: Priority in enrollment will be given to students in the BISI Graduate Program.

Provides graduate students in the biological sciences with the foundational knowledge to become better teaching assistants and gives them an introduction into the skills and tools that they need to develop as professional scientists and educators.

0101	Zakiya Whatley	Seats (Total: 30)
	Tu 6:00pm - 8:00pm	ONLINE

BISI712 **Responsible Conduct of Research for Biologists**

Credits: 1 Grading Method: Regular

Credit only granted for: BISI712, BISI688B, or CBMG688B. Formerly: BISI688B and CBMG688B.

An exploration of the ethical dimensions associated with the responsible conduct of scientific research focusing on providing students with practical insights into the existing norms and expectations of working scientists.

0101	Anne Simon **Meets August 31, 2020 - October 16, 2020** Th 2:00pm - 4:00pm	Seats (Total: 20) ONLINE
0201	Leslie Pick **Meets October 19, 2020 - December 14, 2020** M 4:00pm - 6:00pm	Seats (Total: 10) ONLINE
0301	Charles Delwiche **Meets August 31, 2020 - October 16, 2020** Th 2:00pm - 4:00pm	Seats (Total: 10) ONLINE
0401	Charles Delwiche **Meets October 19, 2020 - December 14, 2020** Tu 4:00pm - 6:00pm	Seats (Total: 10) ONLINE

BISI799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BISI898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Restriction: Must be in Biological Sciences (Doctoral) program.

Contact department for information to register for this course.

BISI899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BMGT Business and Management Fall 2020

BMGT099 **Internship Seminar**

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Complements students' supervised work experiences. Involves exploring career options, developing professional work skills, examining the relationship between internship and academic coursework. Course may be repeated.

Contact department for information to register for this course.

BMGT110 **Introduction to the Business Value Chain**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE

Students are provided with an introduction to the business value chain with an emphasis on inter-organizational and intra-organizational coordination of core business processes. Emphasis is on cross-functional integration and the efficient and effective management of core processes with an emphasis on marketing, operations and supply chain management.

BMGT110 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Jeff Miller TuTh 12:30pm - 1:45pm	Seats (Total: 250) ONLINE

BMGT110F **Introduction to the Business Value Chain**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE

Restricted to Smith School's Smith Start (FPFF) students.

FP01	Jeffrey Mund MW 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 35) VMH 1528 ONLINE
	This section of BMGT110F will meet online with synchronous meetings at the listed day/time. Reduced capacity in-person meetings will also be offered at the listed day/time. Contact instructor for details.	
FP02	Jeffrey Mund MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 35) VMH 1528 ONLINE
	This section of BMGT110F will meet online with synchronous meetings at the listed day/time. Reduced capacity in-person meetings will also be offered at the listed day/time. Contact instructor for details.	

FP03	Jeffrey Mund MW 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 35) VMH 1528 ONLINE
	This section of BMGT110F will meet online with synchronous meetings at the listed day/time. Reduced capacity in-person meetings will also be offered at the listed day/time. Contact instructor for details.	
FP04	Hugh Turner Class time/details on ELMs	Seats (Total: 35) ONLINE
	This section of BMGT110F will meet fully online in an asynchronous format.	
FP05	Hugh Turner Class time/details on ELMs	Seats (Total: 35) ONLINE
	This section of BMGT110F will meet fully online in an asynchronous format.	
FP06	Justin Reyna TuTh 9:30am - 10:45am	Seats (Total: 35) ONLINE
	This section of BMGT110F will meet fully online with synchronous meetings at the listed day/time.	
FP07	Justin Reyna TuTh 11:00am - 12:15pm	Seats (Total: 35) ONLINE
	This section of BMGT110F will meet fully online with synchronous meetings at the listed day/time.	
FP08	Leland Gardner MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 35) VMH 1412 ONLINE
	This section of BMGT110F will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.	
FP09	Hugh Turner Class time/details on ELMs	Seats (Total: 35) ONLINE
	This section of BMGT110F will meet fully online in an asynchronous format.	
FP10	Hugh Turner Class time/details on ELMs	Seats (Total: 35) ONLINE
	This section of BMGT110F will meet fully online in an asynchronous format.	

FP11	Hugh Turner	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	This section of BMGT110F will meet fully online in an asynchronous format.	
FP12	Hugh Turner	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	This section of BMGT110F will meet fully online in an asynchronous format.	

BMGT190H **Introduction to Design and Quality**

Credits: 4 Grading Method: Regular General Education: DSSP

Restriction: Must be in the Quest program. Cross-listed with ENES190. Credit only granted for: BMGT190 or ENES190.

QUEST students learn and apply design practices to design new products and services. Working in multidisciplinary teams, students use quality and process improvement methods to identify, analyze, and recommend solutions to real-world problems.

Restricted to Quest Program students.

A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE): Click here for more information on the Fearless Ideas Courses.

0101	Pamela Armstrong	Seats (Total: 45)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	Class time/details on ELMs	ONLINE	
	Tu 6:00pm - 7:50pm	VMH 1335	Discussion

BMGT207 **Technology, Society and the Future of Humanity**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

New emerging and converging technologies (such as blockchain, AI, and synthetic biology) are disrupting business-as-usual in fields as diverse as finance, supply chain, medicine and the creative industries. This course deals with the question of how we should use technology to create ethical economic and social systems that reflect the kind of world we want to exist in 25, 50, 100 years from now. Our ideas of what humanity considers to be a "good life" will influence and govern how disruptive technologies can either contribute to it or lead to a dystrophic future.

0101	Anand Anandalingam	Seats (Total: 60)
	Th 6:30pm - 9:10pm	ONLINE
	Contact instructor or department for details.	

BMGT210 **Foundations of Accounting for Non Business Majors**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed BMGT221; and must not be in a major in the R.H. Smith School of Business. Credit only granted for: (BMGT220 and BMGT221) or BMGT210. Additional information: Does not apply to a Smith School degree. Students pursuing a Smith School minor who have completed both BMGT220 and BMGT221 may substitute these courses for BMGT210. Credit will not be given for both BMGT210 and the combination of BMGT220 and BMGT221.

Provides an understanding of the common statements that report a company's profitability and financial health, and are useful to all economic agents who are engaged with the firm. Students will also recognize and understand managerial accounting as a system for accumulating and modeling information to support decision-making.

Restricted to General Business Minors. BMGT210 will meet fully online with synchronous meetings at the listed day/time for each lecture and discussion section.

0101	Eugene Cantor MW 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Eugene Cantor MW 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0201	Eugene Cantor MW 3:30pm - 4:45pm F 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0202	Eugene Cantor MW 3:30pm - 4:45pm F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

BMGT220 **Principles of Accounting I**

Credits: 3 Grading Method: Regular

Basic theory and techniques of contemporary financial accounting. Includes the accounting cycle and the preparation of financial statements for single owner and partnership forms of business organizations operating as service companies or merchandisers.

Restricted to all students with 24 credit hours completed. All sections of BMGT220 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each lecture. Instructor and TAs will hold weekly online office hours and some in-person office hours may be available.

0101	Progyan Basu MW 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0102	Progyan Basu MW 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0103	Progyan Basu MW 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0104	Progyan Basu MW 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0201	Progyan Basu MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0202	Progyan Basu MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0203	Progyan Basu MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0204	Progyan Basu MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0301	Progyan Basu MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0302	Progyan Basu MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion

0303	Progyan Basu MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion
0304	Progyan Basu MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	 Discussion

BMGT221 **Principles of Accounting II**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220.

Basic theory and techniques of accounting for managerial decision making. Involves the introduction of the corporation and manufacturing operations. Includes cost-volume-profit analysis and capital budgeting. Introduces the topics of income taxation and international accounting.

Restricted to students with 24 credit hours completed. BMGT221 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. Instructor and TAs will hold weekly online office hours.

0101	Gary Bulmash TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE	 Discussion
0102	Gary Bulmash TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE	 Discussion
0103	Gary Bulmash TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE	 Discussion
0104	Gary Bulmash TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE	 Discussion
0201	Gary Bulmash TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE	 Discussion

0202	Gary Bulmash TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE	 Discussion
0203	Gary Bulmash TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE	 Discussion
0204	Gary Bulmash TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE	 Discussion

BMGT221H **Principles of Accounting II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BMGT220.

Basic theory and techniques of accounting for managerial decision making. Involves the introduction of the corporation and manufacturing operations. Includes cost-volume-profit analysis and capital budgeting. Introduces the topics of income taxation and international accounting.

Course restricted to University Honors Students with 24 credit hours completed. BMGT221H will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. Instructor will hold weekly online office hours.

0101	Gary Bulmash TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 35) ONLINE ONLINE	

BMGT230 **Business Statistics**

Credits: 3 Grading Method: Regular General Education: FSAR

Prerequisite: MATH113 or MATH115; or must have math eligibility of MATH120 or higher. Restriction: Must not have completed ENCE302, ENME392, STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course in probabilistic and statistical concepts including descriptive statistics, set-theoretic development of probability, the properties of discrete and continuous random variables, sampling theory, estimation, hypothesis testing, regression and decision theory and the application of these concepts to problem solving in business and management.

BMGT230 lectures and discussions will meet fully online in an asynchronous format. Exams will be online and synchronous with dates and times TBA. Where a BMGT exam conflicts with a regularly scheduled class, the student will be provided with a makeup exam.

0101	Erich Studer-Ellis	Seats (Total: 35)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0102	Erich Studer-Ellis	Seats (Total: 21)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0103	Erich Studer-Ellis	Seats (Total: 35)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0104	Erich Studer-Ellis	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0105	Erich Studer-Ellis	Seats (Total: 27)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0106	Erich Studer-Ellis	Seats (Total: 35)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0201	Erich Studer-Ellis	Seats (Total: 35)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0202	Erich Studer-Ellis	Seats (Total: 35)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

0203	Erich Studer-Ellis	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0204	Erich Studer-Ellis	Seats (Total: 35)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0205	Erich Studer-Ellis	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0206	Erich Studer-Ellis	Seats (Total: 26)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0301	Erich Studer-Ellis	Seats (Total: 35)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0302	Erich Studer-Ellis	Seats (Total: 26)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0303	Erich Studer-Ellis	Seats (Total: 29)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0304	Erich Studer-Ellis	Seats (Total: 27)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0305	Erich Studer-Ellis	Seats (Total: 26)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0306	Erich Studer-Ellis	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

FC01	Radu Lazar	Seats (Total: 32)	
	Class time/details on ELMs	ONLINE	
	Restricted to students in Freshman Connection.		

BMGT230B **Business Statistics**

Credits: 3 Grading Method: Regular General Education: FSAR

Prerequisite: MATH113 or MATH115; or must have math eligibility of MATH120 or higher. Restriction: Must not have completed ENCE302, ENME392, STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course in probabilistic and statistical concepts including descriptive statistics, set-theoretic development of probability, the properties of discrete and continuous random variables, sampling theory, estimation, hypothesis testing, regression and decision theory and the application of these concepts to problem solving in business and management.

Restricted to BMGT majors. BMGT230B lectures and discussins will meet fully online in an asynchronous format. Exams will be online and synchronous with dates and times TBA. Where a BMGT exam conflicts with a regularly scheduled class, the student will be provided with a makeup exam.

0102	Erich Studer-Ellis	Seats (Total: 14)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0104	Erich Studer-Ellis	Seats (Total: 15)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0105	Erich Studer-Ellis	Seats (Total: 8)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0203	Erich Studer-Ellis	Seats (Total: 15)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0205	Erich Studer-Ellis	Seats (Total: 15)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

0206	Erich Studer-Ellis	Seats (Total: 9)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0302	Erich Studer-Ellis	Seats (Total: 9)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0303	Erich Studer-Ellis	Seats (Total: 6)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0304	Erich Studer-Ellis	Seats (Total: 8)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0305	Erich Studer-Ellis	Seats (Total: 9)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0306	Erich Studer-Ellis	Seats (Total: 5)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

BMGT289A **Social Enterprise: Changing the World through Innovation and Transformative Action**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB	General Education: DSSP, SCIS

In this course, students will hear from real-life social entrepreneurs, explore current day social issues of sustainability, climate change, leadership, disruptive innovations, and create or blueprint business plans to generate positive social change. This class will focus on innovative thinking skills, personal narratives, and social interaction strategies and plans.

BMGT289A will meet fully online with synchronous meetings at the listed day/time. In-person sessions may be available depending on student interest and space availability.

0101	Le-Marie Thompson	Seats (Total: 60)	
	W 5:00pm - 7:40pm	ONLINE	

BMGT289B **How Do Innovators Think?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, SCIS

In this course, students will learn about: a) the innovation process and the role of the individual in generating innovations and b) the attributes, habits, and skills of individuals who have successfully started innovative new businesses or significantly added value to an existing company.

Credit will be granted for only one of the following: BMGT289B or HONR289P. BMGT289B will be offered in-person with online content for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

FC01	Mark Wellman F 1:00pm - 4:00pm Class time/details on ELMs	Seats (Total: 27) TWS 1100 ONLINE	Discussion
	Restricted to students in Freshmen Connection.		

BMGT289D **Frauds, Scams, and Thefts: What, How and Why?**

Credits: 3 | Grading Method: Regular | General Education: DSSP, SCIS

The primary objective of this course is for students to gain a conceptual understanding of how fraud occurs, how it can be prevented, and how fraud can be detected through practical application of skills and tools. This course provides general background relating to fraud (e.g. history, prevalence, psychology), and it delves into the myriad types of fraud, scams and theft. This course also examines the trends in fraud detection and investigation; and introduces and explores with students the constant tension between public order and civil liberties in white collar crime, forensics, and hacking.

All sections of BMGT289D will be offered in-person with online content for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Samuel Handwerger MW 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 65) VMH 1412 ONLINE
0201	Samuel Handwerger MW 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 65) VMH 1412 ONLINE

BMGT289E **Entrepreneurial Thinking for Non-Business Majors: How Not to Miss Great Opportunities Your Life Throws at You**

Credits: 3 | Grading Method: Regular | CORE: IE | General Education: DSSP, SCIS

In this course, students learn how to analyze the world around them and then notice and define new trends, emerging problems, impending gaps, and how to turn these into exciting opportunities by providing creative solutions. Students will have a chance to not only sharpen their critical thinking skills, but also learn how to take initiative, develop a working solution, identify and resolve conflicts, and be confident and persistent, yet flexible enough to respond to changes. Student teams identify a compelling problem in present day life and then propose a creative solution taking into account possible difficulties in implementation. In addition, students will also be given problems on a much smaller scale and asked to create and present a workable solution. Students will be exposed to how a visionary's mind works and the creative solution process. In addition, students will also learn how entrepreneurial thinking can improve their day-to-day life.

0101	Oliver Schlake MW 2:00pm - 3:15pm Contact instructor or department for details. *BMGT289E will meet in a blended format with online synchronous meetings at the listed day/time. In-person sessions will be held in weeks 3, 7, and 11. Instructor to provide details via Canvas.*	Seats (Total: 60) ONLINE
0201	Oliver Schlake MW 3:30pm - 4:45pm Contact instructor or department for details. *BMGT289E will meet in a blended format with online synchronous meetings at the listed day/time. In-person sessions will be held in weeks 3, 7, and 11. Instructor to provide details via Canvas.*	Seats (Total: 60) ONLINE

BMGT289I **Why Good Managers Make Bad Decisions**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: MS	General Education: DSSP, SCIS

This course provides an overview of the concepts, approaches, and vocabulary of evidence-based management (EBM) and provides an understanding of how experts in many disciplines can employ evidenced based decision making. EBM is an emerging movement in business to explicitly use the current best information in management decision making with special emphasis on relevant scientific findings and unbiased organizational facts. The course stresses how individuals practicing EBM learn how to rethink their approaches to data and knowledge in order to make more effective decisions.

Why do smart managers make flawed decisions? Why do managers keep believing they have made the right choice, even with disastrous results staring them in the face? Why Good Managers Make Bad Decisions will address how evidence-based management and other decisionmaking tools can be used to uncover hidden assumptions in the corner offices of great corporations. All sections of BMGT289I will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.

0101	Jeff Miller MW 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 240) ONLINE ONLINE	
FC01	Jeff Miller TuTh 3:00pm - 4:15pm Class time/details on ELMs *Restricted to students in Freshman Connection.*	Seats (Total: 40) ONLINE ONLINE	

BMGT289J **Exploring Leadership: Are Hidden Forces at Work?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSSP, SCIS

0101	Mark Wellman Tu 7:00pm - 9:40pm Class time/details on ELMs F 10:00am - 11:20am *Restricted to BSE students in the College Park Scholars Program. BMGT289J will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.*	Seats (Total: 45) ONLINE ONLINE ASY 2203	Discussion
0102	Mark Wellman Tu 7:00pm - 9:40pm Class time/details on ELMs F 11:30am - 12:50pm *Restricted to BSE students in the College Park Scholars Program. BMGT289J will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.*	Seats (Total: 45) ONLINE ONLINE ASY 2203	Discussion
0201	Mark Wellman F 8:30am - 9:50am Class time/details on ELMs *BMGT289J will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.*	Seats (Total: 40) ASY 2203 ONLINE	

BMGT298C **Special Topics in Business and Management; The Inclusive Workplace**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Introductory special topics in business and management.

Contact department for information to register for this course.

BMGT299B **Student Initiated Special Topics; Applied Cloud Computing in Information Systems**

Credits: 1 Grading Method: Sat-Fail

Student initiated special topics in business and management.

Prerequisite: BMGT301. BMGT299B will meet fully online with synchronous meetings at the listed day/time.

0101	Gorkem Ozer, Louiqa Raschid	Seats (Total: 30)
	Tu 5:00pm - 5:50pm	ONLINE

BMGT301 **Introduction to Information Systems**

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Additional information: CMSC majors will not receive credit for this course towards their upper level concentration in their CMSC major. All BMGT majors, including students who are a double major in CMCS, must complete BMGT301 for their BMGT degree.

Comprehensive overview of information systems (IS), which explores the strategic and tactical nature of IS. The basic concepts in analyzing and designing information systems for business applications will be presented. Aspects of data management such as databases, data warehousing, data analysis, and data mining will be analyzed, and the basics of web page and web site design will be outlined. Students will also be introduced to modern information systems infrastructure such as telecommunications, networks, and information systems security. Knowledge of Excel or a similar spreadsheet tool.

Restricted to BMGT majors with 53 credits completed.

0101	Zeinab Karake	Seats (Total: 65)
	MW 12:30pm - 1:45pm	ONLINE
	Class time/details on ELMs	ONLINE
	This section of BMGT301 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	

0201	Zeinab Karake MW 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 65) ONLINE ONLINE
	This section of BMGT301 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0301	Paul Shapiro MW 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 65) VMH 1333 ONLINE
	This section of BMGT301 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for deatils.	
0401	Zeinab Karake TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 65) ONLINE ONLINE
	This section of BMGT301 will meet fully online with a combination of sy chronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0501	Zeinab Karake TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 65) ONLINE ONLINE
	This section of BMGT301 will meet fully online with a combination of sy chronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0601	Zeinab Karake TuTh 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 65) ONLINE ONLINE
	This section of BMGT301 will meet fully online with a combination of sy chronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	

BMGT301F Introduction to Information Systems

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Additional information: CMSC majors will not receive credit for this course towards their upper level concentration in their CMSC major. All BMGT majors, including students who are a double major in CMCS, must complete BMGT301 for their BMGT degree.

Comprehensive overview of information systems (IS), which explores the strategic and tactical nature of IS. The basic concepts in analyzing and designing information systems for business applications will be presented. Aspects of data management such as databases, data warehousing, data analysis, and data mining will be analyzed, and the basics of web page and web site design will be outlined. Students will also be introduced to modern information systems infrastructure such as telecommunications, networks, and information systems security. Knowledge of Excel or a similar spreadsheet tool.

Restricted to second year students in the Smith School's Smith Start program (FPFF). BMGT301F will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at thelisted day/time for each section.

FP01	Zeinab Karake MW 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 65) ONLINE ONLINE
FP02	Zeinab Karake MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 65) ONLINE ONLINE

BMGT302 Designing Applications for Business Analytics

Credits: 3 Grading Method: Regular

Prerequisite: BMGT301; or permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business; and must not be in the Computer Science major.

The course introduces structured and object-oriented programming and its applications in business functions and analytics. Students will apply problem-solving skills to create software solutions using programming logic and data structures. The course especially emphasizes learning by doing exercises using a modern, high-level programming language and industry standard software.

Restricted to BMGT majors with 53 credit hours completed. Not open to Computer Science Majors. The specific programming language used in the course is subject to change as we tailor the course content to industry standards. All sections of BMGT302 will meet fully online with synchronous meetings at the listed day/time for each section.

0101	John Bono TuTh 3:30pm - 4:45pm	Seats (Total: 35) ONLINE

0201	John Bono TuTh 9:30am - 10:45am	Seats (Total: 35) ONLINE
0301	Peng Huang TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE

BMGT302F **Designing Applications for Business Analytics**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT301; or permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business; and must not be in the Computer Science major.

The course introduces structured and object-oriented programming and its applications in business functions and analytics. Students will apply problem-solving skills to create software solutions using programming logic and data structures. The course especially emphasizes learning by doing exercises using a modern, high-level programming language and industry standard software.

Restricted to students in the Smith School's TBT Fellows program. The specific programming language used in the course is subject to change as we tailor the course content to industry standards. BMGT302F will meet fully online with synchronous meetings at the listed day/time.

FP01	John Bono TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE

BMGT310 **Intermediate Accounting I**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Comprehensive analysis of financial accounting topics related to financial statement preparation and external reporting.

0101	Emanuel Zur TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 35) ONLINE ONLINE
	Restricted to Accounting and Finance majors with 53 credit hours completed. BMGT310 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	

0201	Emanuel Zur	Seats (Total: 35)
	TuTh 9:30am - 10:45am Class time/details on ELMs	ONLINE ONLINE
	Restricted to Accounting and Finance majors with 53 credit hours completed. BMGT310 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0301	Emanuel Zur	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to Accounting and Finance majors with 53 credit hours completed. BMGT310 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
SG91	Musa Subasi	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to Junior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove. BMGT310 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
SG92	Musa Subasi	Seats (Total: 45)
	TuTh 11:00am - 12:15pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT-Shady Grove Juniors majoring in Accounting. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove. BMGT310 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	

BMGT311 **Intermediate Accounting II**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT310.

Continuation of BMGT310.

0101	Stephen Brown	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm Contact instructor or department for details.	ONLINE
	Restricted to accounting majors with 60 credit hours completed. BMGT311 will meet in a blended format with a combination of synchronous and asynchronous online content. Synchronous meetings will take place at the listed day/time for each section. In-person content will be offered based on student interest and space availability. Contact instructor for details.	
0201	Stephen Brown	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm Contact instructor or department for details.	ONLINE
	Restricted to accounting majors with 60 credit hours completed. BMGT311 will meet in a blended format with a combination of synchronous and asynchronous online content. Synchronous meetings will take place at the listed day/time for each section. In-person content will be offered based on student interest and space availability. Contact instructor for details.	

BMGT313 Financial Statement Analysis

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Provides students with the tools to conduct a financial statement analysis, which is part of an overall business analysis. Involves understanding and using the information that financial statements are communicating to users.

Restricted to Accounting and Finance majors with 53 credits completed. All sections of BMGT313 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.

0101	Brent Solomon	Seats (Total: 45)
	TuTh 11:00am - 12:15pm Class time/details on ELMs	ONLINE ONLINE
0201	Brent Solomon	Seats (Total: 45)
	TuTh 9:30am - 10:45am Class time/details on ELMs	ONLINE ONLINE

BMGT313F Financial Statement Analysis

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Provides students with the tools to conduct a financial statement analysis, which is part of an overall business analysis. Involves understanding and using the information that financial statements are communicating to users.

Restricted to Emerging CFOs (FPEC). BMGT313F will meet fully online witha combination of synchronous and asynchronous content. Online synchronous meetings will take place at thelisted day/time.

FP01	Brent Solomon	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMGT321 Managerial Accounting

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

A study of the basic concepts of product costing and cost analysis for management planning and control. Emphasis is placed on the role of the accountant in organizational management, analysis of cost behavior, standard cost budgeting, responsibility accounting and relevant costs for decision-making.

All sections of BMGT321 will meet fully online with synchronous meetings at the listed day/time.

0101	Michael Finch, William Ford	Seats (Total: 40)
	MW 11:00am - 12:15pm	ONLINE
	Restricted to BMGT majors with 53 credit hours completed.	
0201	Michael Finch, William Ford	Seats (Total: 40)
	MW 12:30pm - 1:45pm	ONLINE
	Restricted to BMGT majors with 53 credit hours completed.	
SG91	Michael Finch, William Ford	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	ONLINE
	Restricted to BMGT-Shady Grove Seniors majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT323 Taxation of Individuals

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Federal taxation of individuals focusing on income, exclusions, deductions, depreciation, credits and capital transactions. Property coverage includes the tax consequences of sales and dispositions of investment and business assets. Both tax planning and compliance issues are covered.

Restricted to Accounting majors with 53 credit hours completed. BMGT323 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Alexander Ruygrok MW 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 35) ONLINE ONLINE
0201	Leslie Mostow TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 35) ONLINE ONLINE

BMGT326 Accounting Systems

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221; and (BMGT201 or BMGT301).

A study of accounting systems and computer and communications technology.

Restricted to Accounting majors with 60 credit hours completed. All sections of BMGT326 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Cody Hyman MW 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 35) VMH 1412 ONLINE
0201	James McKinney TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 35) VMH 1333 ONLINE
0301	James McKinney TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 35) VMH 1333 ONLINE

BMGT332 Quantitative Models for Management Decisions

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department.

The aim of this course is to introduce management science techniques for informed decision-making that can be applied in spreadsheet models to assist in the decision-analysis process. Models include Linear Programming, Transportation and Assignment problems, network flow models, Integer and non-linear programming, Simulation and Decision Trees.

Restricted to BMGT majors and Quest students with 53 credit hours completed.

0101	Kazim Ruhi TuTh 9:30am - 10:45am Contact instructor or department for details. *BMGT332 will meet in a blended format with synchronous online meetings at the listed day/time. In-person sessions will be held on 9/15, 10/3, 10/20, 10/31. Instructor to provide details via Canvas.*	Seats (Total: 45) ONLINE
0201	Kazim Ruhi TuTh 11:00am - 12:15pm Contact instructor or department for details. *BMGT332 will meet in a blended format with synchronous online meetings at the listed day/time. In-person sessions will be held on 9/15, 10/3, 10/20, 10/31. Instructor to provide details via Canvas.*	Seats (Total: 45) ONLINE
0301	Kazim Ruhi TuTh 2:00pm - 3:15pm Contact instructor or department for details. *BMGT332 will meet in a blended format with synchronous online meetings at the listed day/time. In-person sessions will be held on 9/15, 10/3, 10/20, 10/31. Instructor to provide details via Canvas.*	Seats (Total: 45) ONLINE
0401	Kazim Ruhi TuTh 3:30pm - 4:45pm Contact instructor or department for details. *BMGT332 will meet in a blended format with synchronous online meetings at the listed day/time. In-person sessions will be held on 9/15, 10/3, 10/20, 10/31. Instructor to provide details via Canvas.*	Seats (Total: 45) ONLINE

BMGT340 Business Finance

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220; and (BMGT231 or BMGT230).

Topics include: the principles and practices involved in the organization, financing and rehabilitation of business enterprises; the various types of securities and their use in raising funds, apportioning income, risk and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

All sections of BMGT340 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. Some sections may have optional in-person meetings. Contact instructor for details.

0101	Michael Padhi	Seats (Total: 65)
	MW 9:30am - 10:45am Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed.	
0201	Michael Padhi	Seats (Total: 65)
	MW 11:00am - 12:15pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed.	
0301	Karen Hallows	Seats (Total: 61)
	MW 2:00pm - 3:15pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed.	
0401	Karen Hallows	Seats (Total: 65)
	TuTh 12:30pm - 1:45pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed.	
0501	Karen Hallows	Seats (Total: 65)
	TuTh 3:30pm - 4:45pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed.	
0601	Karen Hallows	Seats (Total: 65)
	TuTh 5:00pm - 6:15pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed.	

0701	Karen Hallows MW 3:30pm - 4:45pm Class time/details on ELMs *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 65) ONLINE ONLINE
SG91	Michael Padhi TuTh 11:00am - 12:15pm Class time/details on ELMs *Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 60) ONLINE ONLINE
SG92	Michael Padhi TuTh 12:30pm - 1:45pm Class time/details on ELMs *Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 60) ONLINE ONLINE

BMGT340F **Business Finance**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220; and (BMGT231 or BMGT230).

Topics include: the principles and practices involved in the organization, financing and rehabilitation of business enterprises; the various types of securities and their use in raising funds, apportioning income, risk and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

Restricted to students in the Smith School's Sophomore Finance Fellows Program. BMGT340F will meet fully online with synchronous meetings at the listed day/time.

FP01	Michael Padhi MW 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

BMGT340N **Business Finance**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220; and (BMGT231 or BMGT230).

Topics include: the principles and practices involved in the organization, financing and rehabilitation of business enterprises; the various types of securities and their use in raising funds, apportioning income, risk and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

Restricted to agricultural and resource economics majors (0111C) with 53 credit hours completed. BMGT340N will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at thelisted day/time.

0301	Karen Hallows	Seats (Total: 4)
	MW 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMGT341 **Financial Markets**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in BMGT340. Formerly: BMGT498G.

Shows the interconnectedness of the markets. The role of the Central bank and monetary policy is included in this context. Students develop an understanding of: (i) the determination of interest rates; (ii) financial instruments, markets and institutions; (iii) the impact of monetary policy on institutions; and (iv) how financial innovations create markets.

Restricted to Finance majors with 60 credit hours completed. All sections of BMGT341 will meet fully online with synchronous meetings at the listed day/time for each section.

0101	Julie Pavlovsky	Seats (Total: 45)
	TuTh 9:30am - 10:45am	ONLINE
0201	Julie Pavlovsky	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	ONLINE
0301	Julie Pavlovsky	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	ONLINE

BMGT342F **Wall Street Finance**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Credit only granted for: BMGT448F or BMGT342. Formerly: BMGT448F.

Using concepts and tools of finance, students will examine a wide range of business problems and explore possible solutions. The course is designed to improve a student's problem solving capabilities, business writing and communication skills, teamwork, and planning skills. Students will also gain experience in analyzing issues frequently faced by financial decision-makers.

Restricted to Junior Wall Street Fellows. All sections of BMGT342F will meet fully online with synchronous meetings at the listed day/time.

FP01	Julie Pavlovsky	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	ONLINE

BMGT343 **Investments**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Credit only granted for: BMGT343 or ECON435. Additional information: This course cannot be used to fulfill any requirements for majors in Economics.

An introduction to financial investments. Topics include: securities and securities markets; investment risks, returns and constraints; portfolio policies; and institutional investment policies.

Restricted to Finance majors with 60 credit hours completed.

0101	Ryan Guttridge	Seats (Total: 48)
	MW 12:30pm - 1:45pm	ONLINE
	Class time/details on ELMs	ONLINE
	This section of BMGT343 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	
0201	Kenneth Fuller	Seats (Total: 48)
	TuTh 11:00am - 12:15pm	ONLINE
	Contact instructor or department for details.	
	This section of BMGT343 will meet online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. Some in-person content may be offered based on student interest and space availability. Contact instructor for details.	
0301	Kenneth Fuller	Seats (Total: 48)
	TuTh 12:30pm - 1:45pm	ONLINE
	Contact instructor or department for details.	
	This section of BMGT343 will meet online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. Some in-person content may be offered based on student interest and space availability. Contact instructor for details.	

0401	Ryan Guttridge	Seats (Total: 48)
	MW 11:00am - 12:15pm Class time/details on ELMs	ONLINE ONLINE
	This section of BMGT343 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	
0501	Ryan Guttridge	Seats (Total: 48)
	MW 5:00pm - 6:15pm Class time/details on ELMs	ONLINE ONLINE
	This section of BMGT343 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at listed day/time for each section.	

BMGT345 **Foundations of Financial Management for Non Business Majors**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT210 or BMGT220. Restriction: Must not have completed BMGT340; and must not be a major in the R.H. Smith School of Business. Credit only granted for: BMGT345 or BMGT340. Additional information: Course does not apply to a Smith School degree. BMGT340 may substitute for BMGT345.

Provides students an overview of financial management. Students will understand how a business allocates financial resources in an uncertain environment to maximize shareholder value. In addition students will learn the following: how to apply accounting principles to corporate finance; how to value assets, projects, companies and investment securities; understand the relationship between risk and return and how it impacts investment and corporate decisions; how to calculate a company's cost of capital, and develop an intuitive comprehension of financial concepts and analysis.

Restricted to General Business Minors. BMGT345 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at thelisted day/time.

0101	Michael Padhi	Seats (Total: 100)
	MW 8:00am - 9:15am Class time/details on ELMs	ONLINE ONLINE

BMGT347 **Quantitative Financial Analysis**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340; must have completed or be concurrently enrolled in BMGT343. Credit only granted for: BMGT347 or BMGT448G. Formerly: BMGT448G.

Course provides general coverage of portfolio theory and asset pricing models. Also covers ordinary least squares (OLS), with an emphasis on linear regression application and interpretation of results. Introduces students to financial databases and data analysis in R to apply the theories to real data and test the asset pricing models.

Note: Restricted to Quantitative Finance Fellows. BMGT347 will meet online with synchronous meetings at the listed day/time. Some in-person opportunities may be added based on space availability and student interest.

FP01	Bingkuan Cao MW 9:30am - 10:45am Contact instructor or department for details.	Seats (Total: 35) ONLINE

BMGT350 Marketing Principles and Organization

Credits: 3 Grading Method: Regular

Recommended: ECON200.

An introduction to the concepts and principles of marketing including the marketing of service and nonprofit organizations. Provides an overview of all the concepts in marketing including relationship marketing, product development, pricing, promotion, marketing research, consumer behavior, international marketing, distribution and internal marketing to employees.

BMGT350 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.

0101	Roxanne Lefkoff M 9:30am - 10:45am Class time/details on ELMs *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 65) ONLINE ONLINE
0201	Roxanne Lefkoff M 11:00am - 12:15pm Class time/details on ELMs *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 65) ONLINE ONLINE
0301	Roxanne Lefkoff M 12:30pm - 1:45pm Class time/details on ELMs *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 65) ONLINE ONLINE

0401	Marjorie Bonavia W 9:30am - 10:45am Class time/details on ELMs *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 65) ONLINE ONLINE
0501	Marjorie Bonavia W 11:00am - 12:15pm Class time/details on ELMs *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 65) ONLINE ONLINE
0601	Idil Yaveroglu W 12:30pm - 1:45pm Class time/details on ELMs *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 65) ONLINE ONLINE
0701	Idil Yaveroglu W 2:00pm - 3:15pm Class time/details on ELMs *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 65) ONLINE ONLINE
SG91	Henry Boyd MW 9:30am - 10:45am Class time/details on ELMs *Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 60) ONLINE ONLINE
SG92	Henry Boyd MW 11:00am - 12:15pm Class time/details on ELMs *Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 60) ONLINE ONLINE

BMGT350M **Marketing Principles and Organization**

Credits: 3 Grading Method: Regular

Recommended: ECON200.

An introduction to the concepts and principles of marketing including the marketing of service and nonprofit organizations. Provides an overview of all the concepts in marketing including relationship marketing, product development, pricing, promotion, marketing research, consumer behavior, international marketing, distribution and internal marketing to employees.

Restricted to General Business Minors. BMGT350M will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.

0101	Mary Beth Furst Tu 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 56) ONLINE ONLINE
0201	Wendy Bassett Th 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 60) ONLINE ONLINE

BMGT350N **Marketing Principles and Organization**

Credits: 3 Grading Method: Regular

Recommended: ECON200.

An introduction to the concepts and principles of marketing including the marketing of service and nonprofit organizations. Provides an overview of all the concepts in marketing including relationship marketing, product development, pricing, promotion, marketing research, consumer behavior, international marketing, distribution and internal marketing to employees.

Restricted to agricultural and resource economics (0111C) and horticulture (0107C) majors with 53 credit hours completed. BMGT350N will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time

0101	Mary Beth Furst Tu 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 4) ONLINE ONLINE

BMGT352 **Customer-Centric Innovation**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Credit only granted for: BMGT352 or BMGT382.

Addresses the management of new products and services with a focus on the innovation process, specifically the development and launching of new products or services: Opportunity Identification, Concept Generation, Design, Testing and Launch.

BMGT352 will meet fully online with synchronous meetings at the listed day/time.

0101	Idil Yaveroglu	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ONLINE
	Restricted to BMGT majors and students in the QUEST program with 60 credit hours completed.	

BMGT353 **Retail Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220 and BMGT350.

Planning and implementing retail marketing strategy. Store and nonstore (catalog, internet) retailing. Evaluation of how environmental trends in the consumer market, competition, the economy and technology affect retail strategy in the U.S. and global market.

Restricted to BMGT majors with 60 credit hours completed. BMGT353 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.

0101	Jie Zhang	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	ONLINE
	Class time/details on ELMs	ONLINE
0201	Jie Zhang	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMGT360 **Strategic Management of Human Capital**

Credits: 3 Grading Method: Regular

Provides students with the basic knowledge needed to help organizations attract, select, develop, engage, evaluate, and retain talent. Topics covered may include strategic HRM, the role of globalization, legal issues in HRM, work analysis, HR planning, recruitment, personnel selection, performance management and appraisal, training and development, career development, compensation systems, motivating and rewarding performance, labor relations, and employee health and safety.

BMGT360 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.

0101	Vineet Gambhir MW 2:00pm - 3:15pm Class time/details on ELMs *Restricted to all students with 53 credit hours completed.*	Seats (Total: 60) ONLINE ONLINE
0201	Vineet Gambhir MW 3:30pm - 4:45pm Class time/details on ELMs *Restricted to all students with 53 credit hours completed.*	Seats (Total: 60) ONLINE ONLINE

BMGT362 **Negotiations**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed COMM425. Credit only granted for: BMGT362 or COMM425.

By using a variety of assessment tools, feedback sources, skill-building exercises, and exercise debriefings, this experiential course is designed to enhance students' negotiating self-confidence and improve students' analytical skills, interpersonal skills, creativity and persuasive abilities.

Restricted to Management majors with 53 credit hours completed. BMGT362 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.

0101	Gosia Langa Basit TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE
SG91	Gosia Langa Basit TuTh 11:00am - 12:15pm Class time/details on ELMs *Section Restricted to Shady Grove Juniors*	Seats (Total: 45) ONLINE ONLINE

BMGT363 **Leadership and Teamwork in Organizations**

Credits: 3 Grading Method: Regular

Provides a comprehensive understanding of fundamental leadership concepts, theories, and skills in organizations and applies to assessing and developing effective leadership practices in organizations.

Restricted to Management majors with 53 credit hours completed. BMGT363 will meet primarily online with a combination of synchronous andasynchronous content. Online synchronous meetings will take place at the listed day/time. In-person opportunities to be announced by instructor.

0101	Gerald Suarez MW 5:00pm - 6:15pm Contact instructor or department for details.	Seats (Total: 45) ONLINE

BMGT364 Managing People and Organizations

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

0101	Nicole Coomber MW 12:30pm - 1:45pm Contact instructor or department for details. *Restricted to BMGT majors with 53 credit hours completed. This section of BMGT364 will meet primarily online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. In-person opportunities to be announced by instructor.*	Seats (Total: 60) ONLINE
0201	Hannah Weiser MW 8:00am - 9:15am *Restricted to BMGT majors with 53 credit hours completed. This section of BMGT364 will meet fully online with synchronous meetings at the listed day/time.*	Seats (Total: 60) ONLINE
0301	Danielle Wang MW 5:00pm - 6:15pm Class time/details on ELMs *Restricted to BMGT majors with 53 credit hours completed. This section of BMGT364 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.*	Seats (Total: 60) ONLINE ONLINE
0401	Gregory Marr TuTh 9:30am - 10:45am Contact instructor or department for details. *Restricted to BMGT majors with 53 credit hours completed. This section of BMGT364 will meet primarily online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. In-person opportunities to be announced by instructor.*	Seats (Total: 60) ONLINE

0501	Gregory Marr	Seats (Total: 60)
	TuTh 11:00am - 12:15pm Contact instructor or department for details.	ONLINE
	Restricted to BMGT majors with 53 credit hours completed. This section of BMGT364 will meet primarily online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. In-person opportunities to be announced by instructor.	
0601	Gregory Marr	Seats (Total: 60)
	TuTh 8:00am - 9:15am Contact instructor or department for details.	ONLINE
	Restricted to BMGT majors with 53 credit hours completed. This section of BMGT364 will meet primarily online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. In-person opportunities to be announced by instructor.	
0701	Sheetal Singh	Seats (Total: 60)
	M 7:00pm - 9:40pm	ONLINE
	Restricted to BMGT majors with 53 credit hours completed. This section of BMGT364 will meet fully online with synchronous meetings at the listed day/time.	
0801	Hannah Weiser	Seats (Total: 60)
	MW 9:30am - 10:45am	ONLINE
	Restricted to BMGT majors with 53 credit hours completed. This section of BMGT364 will meet fully online with synchronous meetings at the listed day/time.	
SG92	Gosia Langa Basit	Seats (Total: 60)
	MW 9:30am - 10:45am Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove. This section of BMGT364 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	

SG93	Gosia Langa Basit	Seats (Total: 60)
	MW 11:00am - 12:15pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove. This section of BMGT364 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	

BMGT364M **Managing People and Organizations**

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

Restricted to General Business Minors

0101	Nicole Coomber	Seats (Total: 115)
	MW 2:00pm - 3:15pm Contact instructor or department for details.	ONLINE
	This section of BMGT364 will meet primarily online with a combination o synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. In-person opportunities to be announced by instructor.	

BMGT364N **Managing People and Organizations**

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

Restricted to agricultural and resource economics (0111C) and dietetics (1307D) majors with 53 credit hours completed.

0101	Nicole Coomber	Seats (Total: 5)
	MW 2:00pm - 3:15pm Contact instructor or department for details.	ONLINE
	This section of BMGT364 will meet primarily online with a combination o synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section. In-person opportunities to be announced by instructor.	

BMGT365 Entrepreneurial Finance and Private Equity

Credits: 3 Grading Method: Regular

Prerequisite: BMGT461 or BMGT361. Restriction: Junior standing or higher. Credit only granted for: BMGT365, ENES466, SMLP471 or HLMN471.

Studies venture capital and private equity using a combination of cases, lectures and guest speakers. Addresses how venture capitalists provide capital to start-up firms in growing industries and how private equity markets provide capital to help established medium-sized firms (often family businesses) grow and restructure. Focuses on how financial, legal, and economic issues are dealt with in the financial contracts between venture capitalists and their limited partners and between capitalists (or other private equity investors) and the firms in which they invest.

Restricted to BMGT majors with 72 credit hours completed and Innovation and Entrepreneurship minors. BMGT365 will meet fully online with snychronous meetings at the listed day/time.

0101	Alan Jacobs	Seats (Total: 40)
	W 7:00pm - 9:40pm Class time/details on ELMs	ONLINE ONLINE

BMGT366 Growth Strategies for Emerging Companies

Credits: 3 Grading Method: Regular

Prerequisite: BMGT461 or BMGT361. Restriction: Junior standing or higher.

Offers practical management tools that are needed to build a new venture into a significant enterprise. The competencies, strategies and structures of successful high performance businesses are studied through cases, videos and guest lecturers. Topics include leadership, internal growth strategies, merger, acquisition and franchising.

Restricted to Innovation and Entrepreneurship Minors and Management Majors. BMGT366 will meet online with synchronous meetings at the listed day/time for each section.

0101	David Kirsch	Seats (Total: 45)
	TuTh 9:30am - 10:45am	ONLINE

SG91	Oliver Schlake TuTh 12:30pm - 1:45pm *Shady Grove senior Management (0503G) majors.*	Seats (Total: 45) ONLINE

BMGT367 **Career Search Strategies in Business**

Credits: 1 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

An overview and opportunity to practice job search skills critical to obtaining internships and full-time positions. Course will cover strategies for exploring career options, preparing job search materials, development of job search skills such as interviewing and networking. Students are encouraged to take this course in the sophomore or junior year.

All BMGT367 sections will meet primarily online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time. A couple of in-person sessions will be scheduled throughout the semester. Contact instructor for details.

0101	Erin Saddler, Meghan Houston M 5:00pm - 5:50pm Contact instructor or department for details. *Restricted to BMGT students with 45 credit hours completed.*	Seats (Total: 50) ONLINE
0201	Susan Powell, Erin Saddler Tu 5:00pm - 5:50pm Contact instructor or department for details. *Restricted to BMGT students with 45 credit hours completed.*	Seats (Total: 50) ONLINE
0301	Michael Poerksen, Erin Saddler W 5:00pm - 5:50pm Contact instructor or department for details. *Restricted to BMGT students with 45 credit hours completed.*	Seats (Total: 50) ONLINE
0401	Erin Saddler, Dina Broydo M 6:00pm - 6:50pm Contact instructor or department for details. *Restricted to BMGT students with 45 credit hours completed.*	Seats (Total: 50) ONLINE
0501	Linda Bowers, Erin Saddler W 5:00pm - 5:50pm Contact instructor or department for details. *Restricted to BMGT students with 45 credit hours completed.*	Seats (Total: 50) ONLINE

0601	Erin Saddler, Rahman Anjorin Tu 5:00pm - 5:50pm Contact instructor or department for details. *Restricted to BMGT students with 45 credit hours completed.*	Seats (Total: 50) ONLINE
SG91	Sadie Edmonds, Erin Saddler W 3:00pm - 3:50pm Contact instructor or department for details. *Restricted to BMGT-Shady Grove Junior Entrepreneurship, Inernational Business & Marketing Majors. Other students may request enrollment on a space available basis. UMCP undergraduate students are not eligible to enroll at Shady Grove.*	Seats (Total: 60) ONLINE
SG92	Rachel Cotton, Erin Saddler W 3:00pm - 3:50pm Contact instructor or department for details. *Restricted to BMGT-Shady Grove Junior Accounting Majors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 60) ONLINE

BMGT370 Introduction to Transportation

Credits: 3 Grading Method: Regular

An overview of the transportation field with an emphasis on freight movements from the perspective of both providers of capacity and users of freight services. Examines the characteristics of the freight modes and the role of each mode as a major component of logistics and supply chain management. Explores the economics, energy use, and finances of each mode as well as the impact of government policies on each mode's future. Discussion of infrastructure and capacity needs of the transportation system and its ability to support the economy.

Restricted to BMGT majors with 53 credit hours completed. BMGT370 will be offered in-person with online content for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Leland Gardner TuTh 8:00am - 9:15am Class time/details on ELMs	Seats (Total: 45) VMH 1330 ONLINE
0201	Leland Gardner TuTh 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 45) VMH 1330 ONLINE

BMGT372 Introduction to Logistics and Supply Chain Management

Credits: 3 Grading Method: Regular

Supply chain management involves the coordination of suppliers, manufacturers, distributors, and retailers to ensure that products and services are available to the final consumer in a timely and cost-effective fashion. Logistics management is the subset of supply chain management dealing with the physical flows of product and includes such activities as transportation management, warehousing, materials handling, inventory management, and order fulfillment. Attention is paid to the logistics cost trade-offs within the firm and between members of the supply chain.

Restricted to BMGT majors with 53 credit hours completed.

0101	Niratcha Tungtisanont TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE
	This section of BMGT372 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0201	Niratcha Tungtisanont TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE
	This section of BMGT372 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0301	Leland Gardner MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 45) VMH 1412 ONLINE
	This section of BMGT372 will be offered in-person with online content for students who cannot attend in person and to allow for social distancing in reduced capacity classrooms. Details to be provided by instructor.	
0401	Niratcha Tungtisanont TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE
	This section of BMGT372 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	

BMGT372M Introduction to Logistics and Supply Chain Management

Credits: 3 Grading Method: Regular

Supply chain management involves the coordination of suppliers, manufacturers, distributors, and retailers to ensure that products and services are available to the final consumer in a timely and cost-effective fashion. Logistics management is the subset of supply chain management dealing with the physical flows of product and includes such activities as transportation management, warehousing, materials handling, inventory management, and order fulfillment. Attention is paid to the logistics cost trade-offs within the firm and between members of the supply chain.

Restricted to General Business Minors. BMGT372M will meet fully online in an asynchronous format.

0101	Hugh Turner	Seats (Total: 100)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

BMGT380 **Business Law I**

Credits: 3 Grading Method: Regular

Legal aspects of business relationships. Examination of torts and business crimes, contracts and agency. The law of personal property and bailment relationships. Survey of public policy issues.

0101	T Anenson	Seats (Total: 55)
	MW 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE
	Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT380N. This section of BMGT380 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	
0201	T Anenson	Seats (Total: 60)
	MW 3:30pm - 4:45pm	ONLINE
	Class time/details on ELMs	ONLINE
	Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT380N. This section of BMGT380 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	
0301	T Anenson	Seats (Total: 60)
	MW 5:00pm - 6:15pm	ONLINE
	Class time/details on ELMs	ONLINE
	Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT380N. This section of BMGT380 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	

0401	Jennifer Gershberg TuTh 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 60) ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT380N. This section of BMGT380 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	
0501	Jennifer Gershberg TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 60) ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT380N. This section of BMGT380 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	
0601	Jennifer Gershberg TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 60) ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT380N. This section of BMGT380 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	
0701	Justin Reyna W 7:00pm - 9:40pm	Seats (Total: 60) ONLINE
	Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT380N. This section of BMGT380 will meet fully online with synchronous meetings at the listed day/time.	
0801	Jennifer Gershberg TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 60) ONLINE ONLINE
	Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT380N. This section of BMGT380 will meet fully online with synchronous meetings at the listed day/time.	

SG91	Justin Reyna MW 9:30am - 10:45am	Seats (Total: 60) ONLINE
	Restricted to BMGT-shady Grove Seniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove. This section of BMGT380 will meet fully online with synchronous meetings at the listed day/time.	
SG92	Justin Reyna MW 11:00am - 12:15pm	Seats (Total: 60) ONLINE
	Restricted to BMGT-Shady Grove Seniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove. This section of BMGT380 will meet fully online with synchronous meetings at the listed day/time.	

BMGT380N **Business Law I**

Credits: 3 Grading Method: Regular

Legal aspects of business relationships. Examination of torts and business crimes, contracts and agency. The law of personal property and bailment relationships. Survey of public policy issues.

Restricted to agricultural and resource economics majors (0111C) with 53 credit hours completed. BMGT380N will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	T Anenson MW 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 5) ONLINE ONLINE

BMGT382 **Marketing and Innovation for Entrepreneurs**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed BMGT352. Credit only granted for: BMGT352 or BMGT382. Additional information: Course will not satisfy a Marketing major requirement.

Marketing and Innovation are two critically important activities that determine success in any business venture. This course will focus on understanding the fundamentals of marketing and innovation from the perspective of an entrepreneur. At a broad level, we will apply proven marketing frameworks (STP and 4Ps) to effectively deliver innovation in an entrepreneurial context.

BMGT382 will meet fully online with synchronous meetings at the listed day/time for each section.

0101	Idil Yaveroglu TuTh 12:30pm - 1:45pm *Restricted to Innovation and Entrepreneurship Minors.*	Seats (Total: 40) ONLINE
SG91	Mary Beth Furst TuTh 9:30am - 10:45am *Restricted to Junior BMGT-Shady Grove students majoring in Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 45) ONLINE

BMGT385 Operations Management

Credits: 3 Grading Method: Regular

Credit only granted for: BMGT385 or ENME426.

Studies the design, management and improvement of a firm's processes and systems for creation and delivery of products and services. Includes strategic and operational views of supply chain, product development, and capacity analysis, highlighting the competitive advantages that operations management can provide the firm.

Restricted to BMGT majors and QUEST program students with 53 credit hours completed and to Business Process Fellows. BMGT385 will meet fully online with synchronous meetings at the listed day/time for each section.

0101	Zhi-Long Chen TuTh 11:00am - 12:15pm	Seats (Total: 45) ONLINE
0201	Zhi-Long Chen TuTh 12:30pm - 1:45pm	Seats (Total: 45) ONLINE
0301	Kazim Ruhi TuTh 12:30pm - 1:45pm	Seats (Total: 45) ONLINE

BMGT390H Designing Innovative Systems

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES190 or BMGT190. Restriction: Must be in the QUEST program. Cross-listed with ENES390. Credit only granted for: BMGT390 or ENES390.

QUEST students develop an understanding of complex systems that incorporate elements of business and technical design and analyze how these systems evolve over time and may be shaped by technology disruptions, internal decisions, and external forces. Students apply these concepts to real-world complex systems in a team environment.

Restricted to QUEST program students. Cross-listed with ENES390H. BMGT390H will meet in person at the listed day/time and will also be available in synchronous online format for students who cannot attend in person.

0101	David Ashley, Joseph Bailey TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 55) VMH 1333 ONLINE

BMGT392 Introduction to International Business Management

Credits: 3 Grading Method: Regular

Prerequisite: ECON200.

A study of the domestic and foreign environmental factors affecting the international operations of U.S. business firms. The course also covers the administrative aspects of international marketing, finance and management.

Restricted to BMGT majors with 53 credit hours completed. BMGT392 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.

0101	Wilbur Chung MW 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 30) ONLINE ONLINE
0201	Wilbur Chung MW 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 30) ONLINE ONLINE

BMGT397 Mentoring Multidisciplinary Teams

Credits: 3 Grading Method: Regular

Restriction: Restricted to QUEST Program (TQMP) students. Also offered as: ENES397. Credit only granted for: BMGT397 or ENES397.

QUEST students practice essential skills for mentoring and coaching multidisciplinary teams. These include effective communications, facilitation, conflict resolution, and the ability to motivate. Students will practice these skills as mentors for student teams from BMGT/ENES 190H. In the process, they will strengthen their knowledge of design and quality techniques.

Restricted to QUEST program students. Cross-listed with ENES397. BMGT397 will meet in person at the listed day/time and will also be available in synchronous online format for students who cannot attend in person.

0101	Pamela Armstrong Tu 5:00pm - 7:40pm	Seats (Total: 9) VMH 1415

BMGT398 **Individual Study in Business and Management**

(Perm req)

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

BMGT398A **Individual Study in Business and Management; Internship**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Restricted to Smith School of Business students. Interested students should contact Erin Fields Saddler (esaddler@rhsmith.umd.edu) for details and permission.

0101	Erin Saddler Contact instructor or department for details.	Seats (Total: 35)
SG91	Erin Saddler Contact instructor or department for details.	Seats (Total: 10)

BMGT398C **Individual Study in Business and Management; Undergraduate Teaching Scholars Training**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail

Restricted to Accounting Teaching Scholars (FPTS).

0101	Progyan Basu Contact instructor or department for details.	Seats (Total: 19)

BMGT402 **Database Systems**

Credits: 3 Grading Method: Regular

Recommended: BMGT302. Credit only granted for: INST327 or BMGT402.

The fundamentals of database management systems (DBMS), data models, query processing, and data warehouses, and their application in the development of business information systems will be covered. An important goal of this course is to understand the value of information resources and information management challenges within an organization.

Restricted to BMGT majors and Business Analytics minors with 72 credit hours completed. BMGT402 will meet fully online with synchronous meetings at the listed d ay/time for each section.

0101	John Bono TuTh 2:00pm - 3:15pm Th 6:00pm - 6:50pm	Seats (Total: 35) ONLINE ONLINE	 Lab
0201	Yifei Wang MW 3:30pm - 4:45pm Tu 6:00pm - 6:50pm	Seats (Total: 35) ONLINE ONLINE	 Lab
0301	Woei-Jyh Lee MW 9:30am - 10:45am Tu 7:00pm - 7:50pm	Seats (Total: 35) ONLINE ONLINE	 Lab
0401	Woei-Jyh Lee MW 8:00am - 9:15am Tu 8:00pm - 8:50pm	Seats (Total: 35) ONLINE ONLINE	 Lab
0501	John Bono TuTh 8:00am - 9:15am Th 5:00pm - 5:50pm	Seats (Total: 35) ONLINE ONLINE	 Lab

BMGT403 **Systems Analysis and Design**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT301; or students who have taken courses with comparable content may contact the department. Recommended: BMGT302.

Techniques and tools applicable to the analysis and design of computer-based information systems. System life cycle, requirements analysis, logical design of databases and performance evaluation. Emphasis on case studies. Project required that involves the design, analysis and implementation of an information system.

Restricted to Information System students with 72 credits. BMGT403 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Hassan Ibrahim MW 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 35) VMH 1212 ONLINE	

0201	Hassan Ibrahim M 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 35) VMH 1212 ONLINE
0301	Hassan Ibrahim MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 35) VMH 1212 ONLINE
0401	Paul Shapiro M 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 35) VMH 1333 ONLINE
0501	Paul Shapiro W 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 35) VMH 1333 ONLINE

BMGT406 **Developing Applications for the Web and Social Media**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT402 and BMGT302. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Credit only granted for: INST377 or BMGT406.

The design and development of Web applications and the underlying platforms and standards for Web application development will be covered. It will examine the phenomenon of social media, social networking and crowdsourcing and understand their use within organizations.

Restricted to BMGT majors with 72 credit hours completed. BMGT406 will be offered in-person with synchronous online streaming for students wo cannot attend in-person and to allow social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Louiqa Raschid MW 5:00pm - 6:50pm Class time/details on ELMs	Seats (Total: 20) VMH 2203 ONLINE

BMGT407 **Information Systems Projects**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT402 and BMGT403. Restriction: Senior standing.

Senior capstone course for the decision and information sciences major. Collected knowledge from the DIS courses and application to significant problems of size and complexity. State-of-the-art research ideas and current business and industrial practices in information systems.

Restricted to Information Systems majors with 86 credit hours completed. BMGT407 will be offered in-person with synchronous online streaming for students who can not attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Hassan Ibrahim MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 35) VMH 2203 ONLINE
0201	Hassan Ibrahim W 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 35) VMH 2203 ONLINE

BMGT408C **Emerging Topics in Information Systems; Quality Web Development in Business**

Credits: 3 Grading Method: Regular

Selected advanced topics covering emerging developments in the field of decision and information technologies.

Restricted to QUEST program students. BMGT408C will meet fully online with synchronous meetings at the listed day/time.

0101	James Purtilo, Daniel Laurence M 5:00pm - 7:40pm	Seats (Total: 25) ONLINE

BMGT408E **Emerging Topics in Information Systems; Big Data and Artificial Intelligence for Business**

Credits: 3 Grading Method: Regular

Selected advanced topics covering emerging developments in the field of decision and information technologies.

Prerequisite: BMGT402. Restricted to BMGT majors with 72 credit hours completed. This course requires a relatively powerful laptop with at least 8 GB of memory and 30 GB of free space on hard drive. BMGT408E will meet fully online with synchronous meetings at the listed day/time.

0101	Vidit Mehta MW 12:30pm - 1:45pm	Seats (Total: 30) ONLINE

BMGT411 **Ethics and Professionalism in Accounting**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT311. Restriction: Must be in Accounting program.

Analysis and discussion of issues relating to ethics and professionalism in accounting.

Restricted to Accounting majors with 86 credit hours completed. BMGT411 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Mary Keim MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 35) ONLINE ONLINE
0201	Mary Keim MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 35) ONLINE ONLINE

BMGT422 **Auditing Theory and Practice**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT310; and must have completed or be concurrently enrolled in BMGT311.

A study of the independent accountant's attest function, generally accepted auditing standards, compliance and substantive tests and report forms and opinions.

0101	James McKinney MW 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 42) VMH 1336 ONLINE
	Restricted to Accounting majors. This section of BMGT422 will be offered in person with synchronous online streaming for stduents who cannot attend in person and to allow for social distancing in reduced capacity classrooms. Contact instructor fordetails.	
0201	James McKinney MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 42) VMH 1336 ONLINE
	Restricted to Accounting majors. This section of BMGT422 will be offered in person with synchronous online streaming for stduents who cannot attend in person and to allow for social distancing in reduced capacity classrooms. Contact instructor fordetails.	
SG91	Mary Keim TuTh 12:30pm - 1:45pm	Seats (Total: 45) ONLINE
	Restricted to BMGT-Shady Grove Seniors majoring in Accounting. This section of BMGT422 will be offered fully online with synchronous meetings at the listed day/time.	

BMGT424 **Advanced Accounting**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT311.

Advanced accounting theory applied to specialized topics and current problems. Emphasis on consolidated statements and partnership accounting.

Course restricted to Accounting majors. BMGT424 will meet primarily online with weekly in-person office hours.

0101	Samuel Handwerger	Seats (Total: 42)
	MW 2:00pm - 3:15pm Contact instructor or department for details.	ONLINE

BMGT428J **Special Topics in Accounting; Accounting Advisory for Closely Held Businesses**

Credits: 3 Grading Method: Regular

Selected advanced topics in Accounting.

BMGT428J will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Brent Solomon	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm Class time/details on ELMs	ONLINE ONLINE

BMGT430 **Data Modeling in Business**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or permission of BMGT-Robert H. Smith School of Business.

Explores the role of statistical models in business analytics to drive managerial decision-making and improve performance through the use of relevant data-motivated examples. Topics include regression models (both simple and multiple regression, as well as logistic regression for binary data), model validation, variable transformation, variable selection, discriminant analysis, and forecasting. These topics are modeled using state-of-the-art data analytics software.

Restricted to BMGT majors with 72 credit hours completed or Business Analytics minors. BMGT430 will meet fully online in an asynchronous format.

0101	Radu Lazar	Seats (Total: 50)
	Class time/details on ELMs	ONLINE
0201	Radu Lazar	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

0301	Radu Lazar Class time/details on ELMs	Seats (Total: 50) ONLINE
0401	Radu Lazar Class time/details on ELMs	Seats (Total: 50) ONLINE

BMGT431 **Data Analytics**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT430.

An introduction to the tools and techniques that are central to the analysis of abundant data that is being collected in many forms including web traffic, social network data, and reviews and comments on websites.

Restricted to Business Analytics minors or OM majors. BMGT431 will meet fully online in an asynchronous format.

0101	Radu Lazar Class time/details on ELMs	Seats (Total: 45) ONLINE
0201	Radu Lazar Class time/details on ELMs	Seats (Total: 45) ONLINE

BMGT434 **Analytics Consulting: Cases and Projects**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT332; and (MATH120 or MATH140; or must have completed MATH220). Or students who have taken courses with comparable content may contact the department. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

This course assumes that students have already been introduced to the concepts and techniques of operations research/business analytics (OR/BA). Published papers, short cases, and projects in OR/BA will be analyzed and discussed in a thoughtful way, taking into account the soft (people-related) issues and the hard (mathematical/optimization) issues.

Restricted to BMGT majors, QUEST students, and Business Analytics minors with 72 credit hours completed. BMGT434 will meet primarily online with a combination of synchronous and asynchronous content. Synchronous meetings will take place at the listed day/time. Optional in-person meetings will be scheduled on Fridays.

0101	Pamela Armstrong, Wedad Elmaghraby, Maria Bardossy MW 2:00pm - 3:15pm Contact instructor or department for details.	Seats (Total: 40) ONLINE

BMGT435 Business Process Simulation

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Develop and plan simulation studies, build simulation models with special purpose software, analyze and interpret the results. Extensive use of applications and real-world examples. The emphasis is on model formulation and the interpretation of results, rather than mathematical theory.

Restricted to BMGT majors or Business Analytics minors with 60 credits completed. BMGT435 will meet primarily online with synchronous online meetings at the listed day/time. Weekly in-person office hours will be scheduled.

0101	Sujin Kim TuTh 9:30am - 10:45am Contact instructor or department for details.	Seats (Total: 45) ONLINE

BMGT438A Special Topics in Operations Management; Applied Quantitative Analysis

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected advanced topics in operations management.

Course restricted to QUEST students. Cross-listed with ENES489A. Credit granted for BMGT438A or ENES489A. BMGT438A will meet in person at the listed day/time and will also be available in a synchronous online format for student who cannot attend in person.

0101	Pamela Armstrong, Joseph Bailey TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 47) ESJ 0202 ONLINE

BMGT440 Advanced Financial Management

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340.

Analysis and discussion of cases and readings relating to financial decisions of the firm. The application of finance concepts to the solution of financial problems is emphasized.

Restricted to BMGT majors with 68 credit hours completed. BMGT440 will meet fully online with synchronous meetings at the listed day/time for each section.

0101	Elinda Kiss MW 9:30am - 10:45am	Seats (Total: 45) ONLINE
0201	David Kass TuTh 2:00pm - 3:15pm	Seats (Total: 48) ONLINE
0301	David Kass TuTh 3:30pm - 4:45pm	Seats (Total: 48) ONLINE
0401	Elinda Kiss MW 11:00am - 12:15pm	Seats (Total: 45) ONLINE
0501	David Kass TuTh 11:00am - 12:15pm	Seats (Total: 48) ONLINE

BMGT441 **Fixed Income**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Credit only granted for: BMGT448A or BMGT441. Formerly: BMGT448A.

Describes important financial instruments which have market values that are sensitive to interest rate movements. Develops tools to analyze interest rate sensitivity and value fixed income securities. Defines and explains the vocabulary of the bond management business.

Restricted to Finance majors with 72 credit hours completed. BMGT441 will meet fully online with synchronous meetings at the listed day/time.

0101	Aysun Alp Paukowits MW 9:30am - 10:45am	Seats (Total: 45) ONLINE

BMGT443 **Applied Equity Analysis and Portfolio Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT343.

Study and application of the concepts, methods, models, and empirical findings to the analysis, valuation and selection of securities, especially common stock.

Restricted to BMGT majors with 84 credit hours completed. BMGT443 will meet fully online with synchronous meetings at the listed day/time for each section.

0101	Joseph Perfetti MW 11:00am - 12:15pm	Seats (Total: 45) ONLINE
0201	Joseph Perfetti MW 2:00pm - 3:15pm	Seats (Total: 45) ONLINE
0301	Joseph Perfetti MW 3:30pm - 4:45pm	Seats (Total: 45) ONLINE
0401	Joseph Perfetti MW 12:30pm - 1:45pm	Seats (Total: 45) ONLINE

BMGT444 **Futures and Options Contracts**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT343. Credit only granted for: BMGT444 or MATH424.

The institutional features and economic rationale underlying markets in futures and options. Hedging, speculation, structure of futures prices, interest rate futures, efficiency in futures markets and stock and commodity options.

Restricted to Finance majors with 84 credit hours completed. BMGT444 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Albert Crosby MW 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE
0201	Albert Crosby MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE

BMGT445 **Banking and Financial Institutions**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Recommended: ECON330 or BMGT341.

Analysis and discussion of cases and readings in commercial bank management. The loan function is emphasized; also the management of liquidity reserves, investments for income and source of funds. Bank objectives, functions, policies, organization, structure, services and regulation are considered.

Restricted to Finance majors with 84 credit hours completed.

0101	Michael Padhi	Seats (Total: 45)
	MW 12:30pm - 1:45pm Contact instructor or department for details.	ONLINE
	This section of BMGT445 will meet primarily online with a combination o synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time. In-person office hours will be available.	
0201	Elinda Kiss	Seats (Total: 45)
	MW 3:30pm - 4:45pm	ONLINE
	This section of BMGT445 will meet fully online with synchronous meeting at the listed day/time.	

BMGT445F **Banking and Financial Institutions**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Recommended: ECON330 or BMGT341.

Analysis and discussion of cases and readings in commercial bank management. The loan function is emphasized; also the management of liquidity reserves, investments for income and source of funds. Bank objectives, functions, policies, organization, structure, services and regulation are considered.

Restricted to Banking and Private Wealth Management Fellows (FPFS). BMGT445F will meet fully online with synchronous meetings at the listed day/time.

FP01	Elinda Kiss	Seats (Total: 35)
	MW 2:00pm - 3:15pm	ONLINE

BMGT446 **International Finance**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340.

Financial management from the perspective of the multinational corporation. Topics covered include the organization and functions of foreign exchange and international capital markets, international capital budgeting, financing foreign trade and designing a global financing strategy. Emphasis of the course is on how to manage exchange and political risks while maximizing benefits from global opportunity sets faced by the firm.

Restricted to Finance and International Business majors with 72 credit hours completed.

0101	Jing Xue TuTh 9:30am - 10:45am Contact instructor or department for details. *This section of BMGT446 will meet primarily online with a combination o synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time. In-person opportunities may be added based on student interest and space availability.*	Seats (Total: 45) ONLINE
0201	Vojislav Maksimovic Th 7:00pm - 9:40pm *This section of BMGT446 will meet fully online with synchronous meeting at the listed day/time.*	Seats (Total: 45) ONLINE
0301	Jing Xue TuTh 12:30pm - 1:45pm Contact instructor or department for details. *This section of BMGT446 will meet primarily online with a combination o synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time. In-person opportunities may be added based on student interest and space availability.*	Seats (Total: 45) ONLINE

BMGT448L **Special Topics in Finance; Hedge Fund Management**

Credits: 3 Grading Method: Regular

Selected advanced topics in finance.

Prerequisite: BMGT340. Restricted to Finance majors with 72 credit hours completed. BMGT448L Will be offered in-person and online with synchronous meetings at the listed day/time. Contact instructor for details.

0101	Kenneth Brodkowitz TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 45) VMH 1336 ONLINE

BMGT449F **Investment Fund Management: Lemma Senbet Fund**

Credits: 3 Grading Method: Regular

The Lemma Senbet Fund is a year-long, advanced finance course available to undergraduate finance majors in their senior year. Ten to twelve students will be selected in the spring of their junior year to participate on the fund, two as portfolio managers and eight to ten as equity analysts. The course provides students with the opportunity to apply what they have learned in finance classes to actual investment decisions, through researching real companies and managing a portfolio of real money.

Restricted to Lemma Senbet Fund Fellows (FPSF). BMGT449F will meet in a combination of online and in-person elements at the listed day/time.

FP01	Sarah Kroncke	Seats (Total: 12)
	TuTh 12:00pm - 1:50pm Class time/details on ELMs	VMH 1511 ONLINE

BMGT450 Integrated Marketing Communications

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Credit only granted for: BMGT354 or BMGT450. Formerly: BMGT354.

In-depth study of coordinated marketing activities including advertising, sales promotion, Internet marketing, direct marketing and personal selling. Emphasizes strategic planning to effectively use these promotional tools to communicate with customers and meet marketing goals. Blends theory and current practice to provide managerial orientation.

Restricted to Shady Grove seniors and Junior IB majors. BMGT450 will meet fully online with synchronous meetings at the listed day/time.

SG91	Marjorie Bonavia	Seats (Total: 45)
	TuTh 9:30am - 10:45am	ONLINE

BMGT451 Consumer Analysis

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Recommended: PSYC100; and PSYC221.

Identifying buyer behavior concepts relevant to a specific marketing problem so that appropriate marketing decisions can be made. Conceptual frameworks are drawn from psychology, sociology, economics, and other social sciences to aid in understanding the behavior of ultimate and industrial buyers.

Restricted to Marketing majors with 68 credit hours completed.

0101	Yajin Wang MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE
	This section of BMGT451 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	
0201	Marjorie Bonavia MW 2:00pm - 3:15pm	Seats (Total: 45) ONLINE
	This section of BMGT451 will meet fully online with synchronous meeting at the listed day/time.	
0301	Yajin Wang MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE
	This section of BMGT451 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.	

BMGT452 Marketing Research Methods

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350 and BMGT230.

Focuses on aiding marketing decision-making through exploratory, descriptive and casual research. Develops student skills in designing market research studies, including selection of data collection method, development of data collection instrument, sample design, collection and statistical analysis of data and reporting the results.

BMGT452 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time for each section.

0101	Chutian Wang TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 40) ONLINE ONLINE
	Restricted to Marketing majors with 72 credit hours completed.	
0201	Lingling Zhang TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 40) ONLINE ONLINE
	Restricted to Marketing majors with 72 credit hours completed.	

0301	Lingling Zhang	Seats (Total: 40)
	TuTh 9:30am - 10:45am Class time/details on ELMs	ONLINE ONLINE
	Restricted to Marketing majors with 72 credit hours completed.	
SG91	Chutian Wang	Seats (Total: 40)
	TuTh 11:00am - 12:15pm Class time/details on ELMs	ONLINE ONLINE
	Restricted to BMGT-Shady Grove Seniors majoring in Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT454 **Global Marketing**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350.

Marketing functions from the global executive's viewpoint, including coverage of global marketing policies relating to product adaptation, data collection and analysis, channels of distribution, pricing, communications and cost analysis. Consideration is given to the cultural, legal, financial and organizational aspects of global marketing.

Restricted to BMGT majors with 72 credit hours completed. BMGT454 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	You Kim	Seats (Total: 45)
	TuTh 11:00am - 12:15pm Class time/details on ELMs	ONLINE ONLINE

BMGT457 **Marketing Policies and Strategies**

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: BMGT350.

This capstone course ties together various marketing concepts using the fundamentals of strategic market planning as the framework. Application of these principles is accomplished by analyzing and discussing cases and by playing a marketing strategy computer simulation game. Analysis of current business articles to understand the link between theory and real-world problem solving.

Restricted to Marketing majors with 100 credit hours completed. BMGT457 will meet fully online with synchronous meetings at the listed day/time for each section.

0101	Mary Harms TuTh 11:00am - 12:15pm	Seats (Total: 38) ONLINE
0201	Mary Harms TuTh 12:30pm - 1:45pm	Seats (Total: 38) ONLINE

BMGT458A **Special Topics in Marketing; Design and Innovation in Marketing**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in marketing.

BMGT458A will meet fully online with synchronous meetings at the listed day/time.

FP01	Mary Harms TuTh 5:00pm - 6:15pm	Seats (Total: 35) ONLINE
	Restricted to students in the Strategic Design and Innovation Fellows program.	

BMGT458B **Special Topics in Marketing; Design Applications in Marketing and Branding**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in marketing.

BMGT458B will meet in person at the listed day/time. Course will also be available in an online format for students who cannot attend in person and to allow for social distancing in reduced capacity classrooms.

FP01	Howard Bomstein M 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 35) VMH 1528 ONLINE
	Restricted to students in the Strategic Design and Innovation Fellows program.	

BMGT458Q **Special Topics in Marketing; Computer Graphics Workshop**

Credits: 3 Grading Method: Regular

Selected advanced topics in marketing.

BMGT458Q will meet fully online wiht synchronous meetings at the listed day/time.

FP01	Kelly Driver	Seats (Total: 31)
	W 7:00pm - 9:40pm	ONLINE
	Restricted to students in the Strategic Design and Innovation Fellows program.	

BMGT458R **Special Topics in Marketing; Advanced Computer Graphics Workshop**

Credits: 3 Grading Method: Regular

Selected advanced topics in marketing.

Restricted to students in the Strategic Design and Innovation Fellows program. BMGT458R will meet fully online with synchronous meetings at the listed day/time.

FP01	Kelly Driver	Seats (Total: 17)
	W 4:00pm - 6:40pm	ONLINE

BMGT461 **Entrepreneurship**

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed BMGT361. Credit only granted for: BMGT261, BMGT361, BMGT461, ENES460, SMLP470 or HLMN470.

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

0101	Maurice Boissiere	Seats (Total: 20)
	Tu 7:00pm - 9:40pm Contact instructor or department for details.	ONLINE
	Restricted to BMGT majors with 72 credit hours completed. Non-majors should register for BMGT 461N. This section of BMGT461 will meet online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time. Several in-person sessions may be added depending on student interest and space availability.	
SG91	Oliver Schlake	Seats (Total: 45)
	Th 2:00pm - 4:40pm	ONLINE
	Restricted to BMGT-Shady Grove students majoring in Accounting, International Business or Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove. This section of BMGT461 will meet online with synchronous meetings at the listed day/time.	

BMGT461M **Entrepreneurship**

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed BMGT361. Credit only granted for: BMGT261, BMGT361, BMGT461, ENES460, SMLP470 or HLMN470.

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

BMGT461M will meet online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at thelisted day/time. Several in-person sessions may be added depending on students interest and space availability. Contact instructor for details.

0101	Brent Goldfarb	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	ONLINE
	Class time/details on ELMs	ONLINE

BMGT461N **Entrepreneurship**

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed BMGT361. Credit only granted for: BMGT261, BMGT361, BMGT461, ENES460, SMLP470 or HLMN470.

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

Open to all non-BMGT majors with 72 credit hours completed. BMGT majors should register for BMGT 461. BMGT461N will meet online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at thelisted day/time. Several in-person sessions may be added depending on students interest and space availability. Contact instructor for details.

0101	Maurice Boissiere	Seats (Total: 20)
	Tu 7:00pm - 9:40pm	ONLINE
	Contact instructor or department for details.	

BMGT463 **Cross-cultural Challenges in Business**

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Examines in depth the nature of international cultural value-differences and their behavioral-related effects in the workplace. Topics include decision-making and leadership styles and reactions to various work assignments and reward structures.

BMGT463 will meet fully online with synchronous meetings at the listed day/time.

0101	Debra Shapiro	Seats (Total: 45)
	MW 2:00pm - 3:15pm	ONLINE
	Restricted to International Business & Mgmt majors with 72 credits.	

BMGT466 Global Business Strategy

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Focuses on the strategic challenges that directly result from and are associated with the globalization of industries and companies. Topics include drivers of industry globalization, difference between global and multi-domestic industry, global expansion strategies, sources of competitive advantage in a global context, and coordination of a company across a global network.

Restricted to International Business majors and Management majors with 72 credit hours completed. BMGT466 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Roy Thomason, Mark Wellman	Seats (Total: 45)
	Th 7:00pm - 9:40pm	ESJ 0224

BMGT466F Global Business Strategy

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Focuses on the strategic challenges that directly result from and are associated with the globalization of industries and companies. Topics include drivers of industry globalization, difference between global and multi-domestic industry, global expansion strategies, sources of competitive advantage in a global context, and coordination of a company across a global network.

Restricted to Global Fellows students only. BMGT466F will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

FP01	Mark Wellman, Roy Thomason	Seats (Total: 36)
	Th 4:00pm - 6:40pm Class time/details on ELMs	ESJ 0224 ONLINE

BMGT467 Strategic Innovation and Entrepreneurship

Credits: 3 Grading Method: Regular

Credit only granted for: BMGT467, ENES463 or HLMN472.

Provides an understanding of how innovation affects the competitive dynamics of markets, how firms can strategically manage innovation, and how firms can create and implement strategies to maximize their likelihood of success.

Restricted to Innovation and Entrepreneurship Minors. BMGT467 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time

0101	Clarence Wesley	Seats (Total: 50)
	Tu 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMGT468V **Special Topics in Management and Organization; Business Models and Methods to Affect Social Change**

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to Social Innovation Fellows. BMGT468V will meet fully online with a combination of synchornous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

FP01	David Kirsch	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE
	Restricted to students in the Social Innovation Fellows program.	

BMGT468Y **Special Topics in Management and Organization; Entrepreneurial Capitalism Around the World**

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to students with 60 credit hours completed. BMGT468Y will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Serguey Braguinsky	Seats (Total: 60)
	MW 9:30am - 10:45am	VMH 1511

BMGT468Z **Special Topics in Management and Organization; Create the Future through Systems Thinking and Design**

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to students with 60 credit hours completed. BMGT468Z will meet primarily online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time. In-person opportunities to be announced by instructor.

0101	Gerald Suarez	Seats (Total: 35)
	MW 11:00am - 12:15pm Contact instructor or department for details.	ONLINE

BMGT471F **Supply Chain Consulting Fellows I**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT372.

Prepares students for a career in Intermodal/Logistics/and Supply Chain Management. Designed to enhance student analytical skills in tackling issues of direct relevance to the operating efficiency and profitability of individual firms. Student will have direct exchanges with executive leaders in this field through participation in national conferences and in-class visits. Students will participate in a national student case competition that focuses on a critical issue facing the industry leaders. Under the direction of the instructor, students conduct academic research on key topics that represent real-world consulting engagements designed to address critical issues faced by the individual companies and result in research-based solutions to these current challenges.

Restricted to Supply Chain Management Fellows (FPLT). BMGT471F will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

FP01	Thomas Corsi	Seats (Total: 35)
	M 6:30pm - 9:10pm Class time/details on ELMs	VMH 1412 ONLINE

BMGT472 **Purchasing and Inbound Logistics**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT372.

Analysis of the resupply activities of logistics management, including purchasing policies, transportation planning, and inventory control. Attention is directed toward total cost minimization and the establishment of a sustainable competitive advantage based on procurement.

Restricted to Supply Chain Management majors only. BMGT472 will meet fully online with synchronous meetings at the listed day/time.

0101	Hyosoo Park MW 9:30am - 10:45am	Seats (Total: 35) ONLINE

BMGT475 **Supply Chain Strategy and Network Design**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT372.

Analysis of the strategic aspects of supply chain management. Emphasis on the creation of end-user value through supply chain cost reductions, service improvements or both. Attention is directed toward the enabling role of technology in support of strategy evaluation and implementation.

Restricted to Supply Chain Management majors (0503T). BMGT475 will be offered in-person with online content for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Leland Gardner MW 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 45) VMH 1412 ONLINE

BMGT476 **Technology Applications in Supply Chain Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT372.

An understanding of the role of technology in managing the supply chain. Provides students with hands-on experience in advanced software systems that build on top of enterprise resource planning systems. Major emphasis is placed on demonstrating that these systems result in supply chain cost reductions and service improvements.

Restricted to SCM and Information Systems majors. BMGT476 will meet fully online with synchronous meetings at the listed day/time.

0101	Hongyi Zhang TuTh 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
0201	Hongyi Zhang TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

BMGT477 **International Supply Chain Management**

Credits: 3 Grading Method: Regular

The study of the importance of the supply chain management within a global context. Topics covered include: the structure, service, pricing and competitive relationships among international carriers and transport intermediaries as well as documentation, location decisions, international sourcing/distribution and management of inventory throughout the international supply chain.

Restricted to SCM majors and International Business majors. BMGT477 will meet online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Adams Steven TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 40) ONLINE ONLINE
0201	Adams Steven TuTh 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 40) ONLINE ONLINE

BMGT484 **Digital Marketing**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Examines the process of developing, implementing, and analyzing strategies for successfully marketing a variety of existing and potential products and services through digital means, including the web, social media, and mobile apps. Both the development and analysis of digital media for marketing will be discussed.

Restricted to BMGT majors with 60 credit hours completed. BMGT484 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Xindi Zhao TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE
0201	Xindi Zhao TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE

BMGT485 **Project Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Modern project management techniques that are used by modern practicing professionals will be covered. Particular attention is given to the management of technology based systems and projects in a business enterprise. The topics covered include: defining project scope, alignment of projects with enterprise strategy, managing project cost, time and risks using tools such as CPM/PERT, and measuring project performance.

Restricted to BMGT and QUEST students with 72 credits completed. BMGT485 will be offered in-person with synchronous online streaming forstudentswho cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0101	Paul Shapiro	Seats (Total: 45)
	MW 3:30pm - 4:45pm	VMH 1333
	Class time/details on ELMs	ONLINE

BMGT490H QUEST Capstone Professional Practicum

Credits: 4 Grading Method: Regular General Education: DSSP

Prerequisite: ENES390 or BMGT390. Cross-listed with: ENES490. Credit only granted for: BMGT490 or ENES490.

The capstone course for the QUEST Honors Program provides students with an opportunity to learn in multidisciplinary teams of business, engineering, and science students in a real-world setting. Companies engage teams of QUEST students with real organizational challenges and dedicate resources to help students address these problems. Student teams must enhance their skills in quality management, process improvement, and systems design and will apply these to add value to a client. In the process, students will improve their teamwork skills.

Restricted to Quest Program students. BMGT490H will meet in person at the listed day/time and will also be available in a synchronous online format for student who cannot attend in person.

0101	James Purtilo, David Ashley, Joseph Bailey	Seats (Total: 45)
	W 5:00pm - 7:40pm	VMH 1415
	Class time/details on ELMs	ONLINE

BMGT491 Scoping Experiential Learning Projects

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BMGT190 or ENES190. Restriction: Restricted to QUEST Program (TQMP) students. Cross-listed with ENES491. Credit only granted for: BMGT491 or ENES491.

QUEST students cultivate relationships with new and current corporate partners and prepare project scopes for QUEST's introductory course, BMGT/ENES 190H, and capstone course, BMGT/ENES 490H. Requires independent work communicating with clients and class visits to a variety of potential project sites.

Prerequiste: BMGT190H or ENES190H. Restricted to Quest. Cross-listed with ENES491. BMGT491 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Jessica Roffe	Seats (Total: 9)
	W 1:00pm - 3:00pm Class time/details on ELMs	ONLINE ONLINE

BMGT495 **Strategic Management**

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A case-based course where students learn to play the role of the "strategic manager" who defines the scope of its business operations and, within the chosen scope, how the firm will compete against rivals. This course focuses on how a firm can both formulate effective business-level and corporate-level strategies to achieve competitive advantage and earn above average profits.

Restricted to BMGT students with 60 credit hours completed.

0101	Protiti Dastidar	Seats (Total: 45)
	MW 9:30am - 10:45am Class time/details on ELMs	VMH 1333 ONLINE
	This section of BMGT495 will be offered in-person and online with synchronous meetings at the listed dayt/time. Contact instructor for details.	
0201	Protiti Dastidar	Seats (Total: 45)
	MW 11:00am - 12:15pm Class time/details on ELMs	VMH 1333 ONLINE
	This section of BMGT495 will be offered in-person and online with synchronous meetings at the listed dayt/time. Contact instructor for details.	
0301	Protiti Dastidar	Seats (Total: 45)
	MW 12:30pm - 1:45pm Class time/details on ELMs	VMH 1333 ONLINE
	This section of BMGT495 will be offered in-person and online with synchronous meetings at the listed dayt/time. Contact instructor for details.	

0401	Evan Starr	Seats (Total: 45)
	MW 2:00pm - 3:15pm Class time/details on ELMs	ONLINE ONLINE
	This section of BMGT495 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0501	Evan Starr	Seats (Total: 45)
	MW 3:30pm - 4:45pm Class time/details on ELMs	ONLINE ONLINE
	This section of BMGT495 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0601	Clarence Wesley	Seats (Total: 45)
	MW 5:00pm - 6:15pm	ONLINE
	This section of BMGT495 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0701	Donna Howell	Seats (Total: 45)
	TuTh 9:30am - 10:45am Class time/details on ELMs	ONLINE ONLINE
	This section of BMGT495 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0801	Yuheng Ding	Seats (Total: 45)
	TuTh 11:00am - 12:15pm Class time/details on ELMs	ONLINE ONLINE
	This section of BMGT495 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
0901	Gregory Marr	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm Contact instructor or department for details.	ONLINE
	This section of BMGT495 will meet primarily online with a combination o synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time. In-person sessions will be added based on space availability.	

1001	Paulo Prochno	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm Contact instructor or department for details.	ONLINE
	This section of BMGT495 will meet primarily online with a combination o synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time. In-person sessions will be added based on space availability.	

BMGT808R **Special Topics in Information Systems; Research Seminar in Decision, Operations and Information Technologies**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Information Systems doctoral field of study.

0101	Sivakumar Viswanathan	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

BMGT808X **Special Topics in Information Systems; Machine Learning in Business Analytics - Methods**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Information Systems doctoral field of study.

0101	Kunpeng Zhang	Seats (Total: 12)
	Meets August 31, 2020 - October 16, 2020	
	F 8:30pm - 11:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BMGT808Y **Special Topics in Information Systems; Machine Learning in Business Analytics - Applications**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Information Systems doctoral field of study.

0101	Jessica Clark	Seats (Total: 12)
	Meets October 19, 2020 - December 14, 2020	
	W 8:30am - 11:55am	ONLINE

BMGT818M **Special Topics in Accounting and Information Assurance; Topics in Financial Accounting**

Credits: 3

Grading Method: Regular, Audit

Special topics specific to the Accounting and Information Assurance doctoral field of study.

0101	Nick Seybert	Seats (Total: 12)
	M 8:30am - 12:00pm	ONLINE

BMGT818R **Special Topics in Accounting and Information Assurance; Workshop in Accounting Research**

Credits: 1-2

Grading Method: Regular, Audit

Special topics specific to the Accounting and Information Assurance doctoral field of study.

0101	Michael Kimbrough	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

BMGT828 **Independent Study in Business and Management**

Credits: 1-9

Grading Method: Regular

Contact department for information to register for this course.

BMGT831 **Operations Research: Extension of Linear Programming and Network Analysis**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: BMGT830; or students who have taken courses with comparable content may contact the department; or permission of BMGT-Robert H. Smith School of Business.

Concepts and applications of network and graph theory in linear and combinatorial models with emphasis on computational algorithms.

0101	Bruce Golden	Seats (Total: 12)
	Tu 7:00pm - 9:40pm	VMH 1418
	Class time/details on ELMs	ONLINE

BMGT838R **Special Topics in Operations Management/Management Science; Research Seminar in Decision, Operations and Information Technologies**

Credits: 1

Grading Method: Regular, Audit

Special topics specific to the Operations Management/Management Science doctoral field of study.

Contact department for information to register for this course.

BMGT840 **Seminar in Financial Theory**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of BMGT-Robert H. Smith School of Business.

Seminar in selected classic and current theoretical and empirical research in the foundations of finance.

0101	Kerry Back	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

BMGT848A **Special Topics in Finance; Financial Research Methods I**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Finance doctoral field of study.

0101	Vojislav Maksimovic	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

BMGT848F **Special Topics in Finance; Workshop in Finance Research**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Finance doctoral field of study.

0101	Xi He, Serhiy Kozak	Seats (Total: 12)
	F 9:00am - 12:00pm	ONLINE
	Class time/details on ELMs	ONLINE

BMGT858A **Special Topics in Marketing; Consumer Goals and Motivation**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Marketing doctoral field of study.

0101	Yajin Wang	Seats (Total: 12)
	Meets October 19, 2020 - December 14, 2020	
	Class time/details on ELMs	ONLINE

BMGT858G **Special Topics in Marketing; Analytical Models**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Marketing doctoral field of study.

0101	Bo Zhou **Meets August 31, 2020 - October 16, 2020** Class time/details on ELMs	Seats (Total: 12) ONLINE

BMGT858R **Special Topics in Marketing; Marketing Research Seminar**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Marketing doctoral field of study.

Course restricted to Marketing PhD students only

0101	Ali Faraji-Rad F 10:00am - 12:30pm Class time/details on ELMs	Seats (Total: 16) ONLINE ONLINE

BMGT868C **Special Topics in Organizational Behavior/Human Resource Management**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	David Kirsch F 12:30pm - 2:00pm Contact instructor or department for details.	Seats (Total: 20) ONLINE

BMGT868D **Special Topics in Organizational Behavior/Human Resource Management; Decision Making**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Rellie Rozin	Seats (Total: 12)
	Meets August 31, 2020 - October 16, 2020	
	W 9:00am - 12:30pm	ONLINE

BMGT868O **Special Topics in Organizational Behavior/Human Resource Management; Organizational Behavior Foundations**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Subrahmaniam Tangirala	Seats (Total: 12)
	Meets October 19, 2020 - December 14, 2020	
	M 8:00am - 11:30am	ONLINE

BMGT868P **Special Topics in Organizational Behavior/Human Resource Management; Organizational Behavior and Human Resource Management Presentations**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Vijaya Venkataramani	Seats (Total: 10)
	Contact instructor or department for details.	

BMGT868R **Special Topics in Organizational Behavior/Human Resource Management; Organizational Behavior and Human Resource Research Methods Foundation**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

Restricted to OBHR and SM&E majors.

0101	Gilad Chen	Seats (Total: 12)
	Meets August 17, 2020 - September 21, 2020	
	M 8:00am - 11:30am	ONLINE
	Class time/details on ELMs	ONLINE

BMGT878C **Special Topics in Strategic Management and Entrepreneurship; Cross Disciplinary Workshop**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Ryan Cooper, Evan Starr	Seats (Total: 12)
	Th 11:00am - 12:30pm	ONLINE
	Contact instructor or department for details.	

BMGT878M **Special Topics in Strategic Management and Entrepreneurship; Formal Models of Innovation and Entrepreneurship**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Serguey Braguinsky	Seats (Total: 12)
	Meets October 19, 2020 - December 14, 2020	
	Tu 3:30pm - 6:35pm	VMH 1511
	Class time/details on ELMs	ONLINE

BMGT878P **Special Topics in Strategic Management and Entrepreneurship; Strategy and Entrepreneurship PhD Presentations**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Brent Goldfarb, Waverly Ding	Seats (Total: 12)
	Th 9:15am - 10:45am	ONLINE

BMGT878R **Special Topics in Strategic Management and Entrepreneurship; Straegy and Entrepreneurship Research Methods Foundation**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	David Waguespack	Seats (Total: 12)
	Meets October 19, 2020 - December 14, 2020	
	W 9:30am - 1:05pm	Location: TBA

BMGT888B **Special Topics in Supply Chain Management; Economics of International Business**

Credits: 2 Grading Method: Regular

Special topics specific to the Supply Chain Management doctoral field of study.

0101	Wilbur Chung	Seats (Total: 12)
	Meets August 31, 2020 - October 16, 2020	
	W 9:30am - 1:05pm	ONLINE

BMGT888L **Special Topics in Supply Chain Management; Logistics Research**

Credits: 3 Grading Method: Regular

Special topics specific to the Supply Chain Management doctoral field of study.

0101	Martin Dresner	Seats (Total: 12)
	M 8:00am - 11:30am	ONLINE

BMGT888W **Special Topics in Supply Chain Management; Workshop in Supply Chain Management**

Credits: 1 Grading Method: Regular

Special topics specific to the Supply Chain Management doctoral field of study.

0101	Martin Dresner	Seats (Total: 12)
	F 1:30pm - 3:00pm	ONLINE

BMGT898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

BMGT899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BMSO Online Business MS Programs Fall 2020

BMSO600 **Data, Models and Decisions**

Credits: 3 Grading Method: Regular

Prerequisite: Permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in an online Business Master of Science program; or permission of BMGT-Robert H. Smith School of Business.

The field of data analytics is a very vibrant and broad field. The amount of data available and computing power have exploded in recent years. There is an increasing demand for business analysts who can select and apply the appropriate methods and interpret the results within the context of the problem. The goal of this course is to learn methods for exploring data and building models with the purpose of supporting data-driven decision making. The content of the course can be grouped as follows: Data Exploration, Probability, Confidence Interval Estimation, Hypothesis Testing and Regression Analysis. The focus will be on exploring realistic business scenarios, analyzing datasets using the appropriate analytical techniques, interpreting the analytic output within the context of the business scenario and translating the statistical results into actionable insights.

MS11	Maria Bardossy	Seats (Total: 25)
	Meets August 31, 2020 - December 12, 2020	
	Tu 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMSO601 **Database Management Systems**

Credits: 3 Grading Method: Regular

Prerequisite: Permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in an online Business Master of Science program; or permission of BMGT-Robert H. Smith School of Business.

The fundamentals of managing data and information within an organization, including enterprise level platforms and tools for data driven analytics. Includes processes for acquiring and cleaning data, storing data, making it available for analytics, visualizing output, and archiving the data for long term use. Involves computational thinking, covers significant theoretical material on data models and queries, and teaches several different analytics and programming tools.

MS11	John Bono	Seats (Total: 25)
	Meets August 31, 2020 - December 12, 2020	
	W 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMSO602 **Decision Analytics**

Credits: 3 Grading Method: Regular

Prerequisite: Permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in an online Business Master of Science program; or permission of BMGT-Robert H. Smith School of Business.

Difficult decisions require spending scarce resources. A 'resource' is any asset used to leverage business objectives, such as time and money. Tradeoffs are involved in allocating resources to one objective as opposed to another. This course develops a quantitative framework for studying resource allocation problems that arise in many industries and areas such as transportation, advertising, finance, and healthcare. The focus will be on translating verbal descriptions into quantitative optimization models, whereby standard tools (such as Microsoft Excel) can be applied to obtain solutions. The course also covers the role of uncertainty and risk in the decision-making process by using Monte-Carlo simulation models.

MS11	Suresh Acharya	Seats (Total: 25)
	Meets August 31, 2020 - December 12, 2020	
	M 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMSO603 **Data Mining and Predictive Analytics**

Credits: 3 Grading Method: Regular

Prerequisite: Permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in an online Business Master of Science program; or permission of BMGT-Robert H. Smith School of Business.

In the business press, on TV, and in board rooms, 'machine learning,' 'AI,' 'big data' and 'data analytics' are now hot topics. Vast quantities of data are being generated these days, including new types of data such as web traffic, social network data, and reviews and comments on websites. This data is a valuable resource that, when used correctly, can create a competitive edge for companies. Advances in computing hardware and algorithms have significantly improved the quality of predictions and effectiveness of business applications based on them. Expertise in working with data, and a sound knowledge of data mining/machine learning methods, is a much sought after skill. The course provides an introduction to the key tools and techniques of data mining/machine learning, including classification, prediction, cluster analysis, association rules, and text mining. The methods covered are Linear Regression, Logistic Regression, K-nearest neighbors, Naive Bayes, Classification and Regression Trees, Ensemble methods, Neural Networks, K-Means and Hierarchical Clustering, and Association Rules. The focus throughout will be on business applications. Examples from Marketing, Finance, Healthcare, and Operations will be used to illustrate the breadth of applications.

MS11	Kislaya Prasad	Seats (Total: 25)
	Meets August 31, 2020 - December 12, 2020	
	Th 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMSO758C **Special Topics in Business; Healthcare Operations Management and Marketing**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

MS31	Michelle Dugas	Seats (Total: 25)
	Meets August 31, 2020 - October 17, 2020	
	MW 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMSO758D **Special Topics in Business; Health Informatics and Information Technologies**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

MS31	Kenyon Crowley	Seats (Total: 25)
	Meets October 19, 2020 - December 12, 2020	
	MW 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMSO758E **Special Topics in Business; Advanced Marketing Analytics**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

MS31	Michel Wedel	Seats (Total: 25)
	Meets October 19, 2020 - December 12, 2020	
	M 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMSO758F **Special Topics in Business; Financial Analytics**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

MS31	Paul Soto	Seats (Total: 25)
	Meets October 19, 2020 - December 12, 2020	
	W 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BMSO758M **Special Topics in Business; Marketing Management**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

MS31	Mary Beth Furst	Seats (Total: 25)
	Meets August 31, 2020 - October 17, 2020	
	M 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BSCI Biological Sciences Program Fall 2020

BSCI126 **Pollinators in Crisis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS General Education: DSNS, SCIS

We will dissect the pollinator crisis, and in the process learn about insects, about the interaction of organisms in complex ecosystems, and about the human-nature interface. Students will work in groups that specialize in an aspect of pollinator biology and their challenges. Instruction will target methods for collecting information, interpretation of scientific information and the professional presentation of findings.

(Sponsoring Dept.: ENTM). Not acceptable for credit for any Biological Sciences major.

0101	David Hawthorne Class time/details on ELMs Tu 9:30am - 10:20am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	David Hawthorne Class time/details on ELMs Tu 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	David Hawthorne Class time/details on ELMs Th 9:30am - 10:20am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	David Hawthorne Class time/details on ELMs Th 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

BSCI135 **Amazing Green: Plants that Transformed the World**

Credits: 4	Grading Method: Regular, Pass-Fail, Audit	CORE: LL	General Education: DSNL, SCIS

An interactive way to learn about plants and science, focusing on how plants have changed human history, the biology of their growth, and the science behind their use.

(Sponsoring Dept.: CBMG). Students must pay a $40.00 laboratory materials fee. Not acceptable for credit for any Biological Sciences major.

0101	Edgar Moctezuma Class time/details on ELMs Class time/details on ELMs	Seats (Total: 26) ONLINE ONLINE	 Lab
0102	Edgar Moctezuma Class time/details on ELMs Class time/details on ELMs	Seats (Total: 26) ONLINE ONLINE	 Lab

0103	Edgar Moctezuma Class time/details on ELMs Class time/details on ELMs	Seats (Total: 26) ONLINE ONLINE	 Lab
0104	Edgar Moctezuma Class time/details on ELMs Class time/details on ELMs	Seats (Total: 26) ONLINE ONLINE	 Lab

BSCI160 **Principles of Ecology and Evolution**

Credits: 3 Grading Method: Regular General Education: DSNL (if taken with BSCI161), DSNS

Prerequisite: Must have math eligibility of MATH120 or higher. Recommended: For Science majors. Credit only granted for: BSCI106 or BSCI160. Formerly: BSCI106.

Basic principles of biology with special emphasis on ecological and evolutionary biology.

(Sponsoring Dept.: BSCI).

6101	Marcia Shofner TuTh 9:30am - 10:45am	Seats (Total: 125) ONLINE
6201	Marcia Shofner TuTh 12:30pm - 1:45pm	Seats (Total: 125) ONLINE
6301	Leo Shapiro Class time/details on ELMs	Seats (Total: 210) ONLINE
6401	Emily Bruns Class time/details on ELMs	Seats (Total: 100) ONLINE
PDS1	Leo Shapiro Tu 6:00pm - 8:50pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 2) ONLINE

BSCI161 **Principles of Ecology and Evolution Lab**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI160. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on ecological and evolutionary biology.

(Sponsoring Dept.: BSCI). Students must pay a $40.00 laboratory materials fee.

6104	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6105	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6110	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6204	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6211	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6304	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6307	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6311	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6401	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6405	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6408	Francisca Saavedra Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
6412	Francisca Saavedra Class time/details on ELMs	Seats (Total: 28) ONLINE	Lab
PDS1	Francisca Saavedra Th 6:00pm - 8:50pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 2) ONLINE	Lab

BSCI161C **Principles of Ecology and Evolution Lab**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI160. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on ecological and evolutionary biology.

Restricted to new freshmen and new transfer students in Biological Science or Neuroscience. (Sponsoring Dept.: BSCI). Students must pay a $40.00 laboratory materials fee.

6108	Francisca Saavedra	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
6205	Francisca Saavedra	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
6210	Francisca Saavedra	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
6305	Francisca Saavedra	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
6404	Francisca Saavedra	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab

BSCI161S **Principles of Ecology and Evolution Lab**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI160. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on ecological and evolutionary biology.

Restricted to College Park Scholars - Life Sciences. (Sponsoring Dept.: BSCI). Students must pay a $40 laboratory materials fee.

6107	Francisca Saavedra	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab

BSCI170 **Principles of Molecular & Cellular Biology**

Credits: 3 Grading Method: Regular General Education: DSNL (if taken with BSCI171), DSNS

Prerequisite: Must have math eligibility of MATH120 or higher. Recommended: For Science majors. Credit only granted for: BSCI105 or BSCI170. Formerly: BSCI105.

Basic principles of biology with special emphasis on cellular and molecular biology.

(Sponsoring Dept.: BSCI).

0201	Michael Keller MWF 11:00am - 11:50am	Seats (Total: 220) ONLINE	
0301	Michael Keller MWF 12:00pm - 12:50pm	Seats (Total: 150) ONLINE	
0401	Reid Compton Class time/details on ELMs	Seats (Total: 220) ONLINE	
FC01	Michael Keller MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection*	Seats (Total: 161) ONLINE	
PDS1	James Sniezek Tu 6:00pm - 8:50pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 50) ONLINE	

BSCI171 **Principles of Molecular & Cellular Biology Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI170. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on cellular and molecular biology.

(Sponsoring Dept.: BSCI). Students must pay a $40.00 laboratory materials fee.

1021	Swarna Mohan Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab
1022	Swarna Mohan Class time/details on ELMs	Seats (Total: 30) ONLINE	Lab

1023	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
1031	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
1032	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
1033	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
2021	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
2022	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
2023	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
2032	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
2033	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
3021	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
3031	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
3032	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
3033	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
3041	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab

4021	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
4022	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
4031	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
4032	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
4041	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
FC1M	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		
FC1N	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		
FC1O	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		
FC3N	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		
FC5A	Swarna Mohan	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		
PDS1	Swarna Mohan	Seats (Total: 30)	
	Th 6:00pm - 8:50pm	ONLINE	Lab
	Restricted to students in the SIE Program. Click here for more information.		

PDS2	Swarna Mohan Th 6:00pm - 8:50pm	Seats (Total: 30) ONLINE	 Lab
	Restricted to students in the SIE Program. Click here for more information.		

BSCI189I **Beyond Race: Human Biological Diversity**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: LL, D | General Education: DSNL, DSSP, DVUP, SCIS

(Sponsoring Dept.: BSCI). Students must pay a $40.00 laboratory materials fee. Not acceptable for credit for any Biological Sciences major.

1003	Joelle Presson MWF 11:00am - 11:50am Tu 9:30am - 12:20pm	Seats (Total: 24) ONLINE ONLINE	 Lab
1005	Joelle Presson MWF 11:00am - 11:50am Tu 1:00pm - 3:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab
1007	Joelle Presson MWF 11:00am - 11:50am W 12:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab
1009	Joelle Presson MWF 11:00am - 11:50am W 3:00pm - 5:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab
1011	Joelle Presson MWF 11:00am - 11:50am Th 9:30am - 12:20pm	Seats (Total: 24) ONLINE ONLINE	 Lab
1013	Joelle Presson MWF 11:00am - 11:50am Th 1:00pm - 3:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab

BSCI201 **Human Anatomy and Physiology I**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: LL | General Education: DSNL

Prerequisite: BSCI170 and BSCI171; or BSCI105; or students who have taken courses with comparable content may contact the department.

Anatomy and physiology of the skeletal, muscular, neural, endocrine, and sensory systems. Course not acceptable toward major requirements in Biological Sciences, Chemistry or Biochemistry.

(Sponsoring Dept.: BIOL).

0101	Justicia Opoku-Edusei, Caitlin Fox MWF 10:00am - 10:50am M 1:00pm - 3:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0102	Caitlin Fox, Justicia Opoku-Edusei MWF 10:00am - 10:50am M 4:00pm - 6:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0103	Justicia Opoku-Edusei, Caitlin Fox MWF 10:00am - 10:50am Tu 8:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	 Lab
0104	Justicia Opoku-Edusei, Caitlin Fox MWF 10:00am - 10:50am Tu 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0105	Justicia Opoku-Edusei, Caitlin Fox MWF 10:00am - 10:50am Tu 6:00pm - 8:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0108	Caitlin Fox, Justicia Opoku-Edusei MWF 10:00am - 10:50am Th 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0109	Justicia Opoku-Edusei, Caitlin Fox MWF 10:00am - 10:50am M 1:00pm - 3:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0110	Justicia Opoku-Edusei, Caitlin Fox MWF 10:00am - 10:50am M 4:00pm - 6:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0111	Justicia Opoku-Edusei, Caitlin Fox MWF 10:00am - 10:50am Tu 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab

0112	Justicia Opoku-Edusei, Caitlin Fox MWF 10:00am - 10:50am Tu 5:00pm - 7:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1101	Sara Lombardi, Caitlin Fox TuTh 12:30pm - 1:45pm M 9:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	 Lab
1102	Caitlin Fox, Sara Lombardi TuTh 12:30pm - 1:45pm M 7:00pm - 9:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1103	Caitlin Fox, Sara Lombardi TuTh 12:30pm - 1:45pm Tu 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1104	Sara Lombardi, Caitlin Fox TuTh 12:30pm - 1:45pm W 9:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	 Lab
1106	Sara Lombardi, Caitlin Fox TuTh 12:30pm - 1:45pm Th 8:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	 Lab
1107	Caitlin Fox, Sara Lombardi TuTh 12:30pm - 1:45pm Th 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1108	Caitlin Fox, Sara Lombardi TuTh 12:30pm - 1:45pm Th 6:00pm - 8:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1109	Caitlin Fox, Sara Lombardi TuTh 12:30pm - 1:45pm M 9:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	 Lab
1110	Caitlin Fox, Sara Lombardi TuTh 12:30pm - 1:45pm Tu 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab

BSCI202 Human Anatomy and Physiology II

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI201; or permission of CMNS-Biology department.

Anatomy and physiology of the cardiovascular, respiratory, immune, digestive, urinary and reproductive systems. Course not acceptable toward major requirements in Biological Sciences, Chemistry or Biochemistry.

(Sponsoring Dept.: BIOL).

0101	Tammatha O'Brien, Caitlin Fox Class time/details on ELMs M 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0102	Tammatha O'Brien, Caitlin Fox Class time/details on ELMs Tu 9:30am - 12:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0105	Caitlin Fox, Tammatha O'Brien Class time/details on ELMs Tu 1:00pm - 3:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0106	Tammatha O'Brien, Caitlin Fox Class time/details on ELMs Tu 7:00pm - 9:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0110	Tammatha O'Brien, Caitlin Fox Class time/details on ELMs W 5:00pm - 7:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0112	Tammatha O'Brien, Caitlin Fox Class time/details on ELMs Th 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0113	Caitlin Fox, Tammatha O'Brien Class time/details on ELMs Th 9:30am - 12:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1101	Caitlin Fox, Sara Lombardi TuTh 9:30am - 10:45am M 5:00pm - 7:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab

1102	Sara Lombardi, Caitlin Fox TuTh 9:30am - 10:45am M 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1103	Caitlin Fox, Sara Lombardi TuTh 9:30am - 10:45am Tu 4:00pm - 6:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1105	Caitlin Fox, Sara Lombardi TuTh 9:30am - 10:45am W 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1106	Caitlin Fox, Sara Lombardi TuTh 9:30am - 10:45am Th 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1107	Caitlin Fox, Sara Lombardi TuTh 9:30am - 10:45am Th 1:00pm - 3:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1108	Caitlin Fox, Sara Lombardi TuTh 9:30am - 10:45am Th 5:00pm - 7:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1109	Sara Lombardi, Caitlin Fox TuTh 9:30am - 10:45am F 8:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	 Lab
PDS1	Caitlin Fox, Justicia Opoku-Edusei Tu 6:00pm - 8:50pm Th 6:00pm - 8:50pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 24) ONLINE ONLINE	 Lab

BSCI207 **Principles of Biology III - Organismal Biology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106. And BSCI170 and BSCI171; or BSCI105. And must have completed or be concurrently enrolled in CHEM131.

The diversity, structure and function of organisms as understood from the perspective of their common physicochemical principles and unique evolutionary histories.

(Sponsoring Dept.: BSCI).

0101	Nicholas Fletcher MWF 9:00am - 9:50am	Seats (Total: 175) ONLINE	
0201	Karen Carleton MWF 2:00pm - 2:50pm	Seats (Total: 150) ONLINE	
0301	Karen Carleton MWF 3:00pm - 3:50pm	Seats (Total: 135) ONLINE	

BSCI222 **Principles of Genetics**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131 and CHEM132; and (BSCI160 and BSCI161; or BSCI106); and (BSCI170 and BSCI171; or BSCI105). Or must have completed BSCI105 or (BSCI170 and BSCI171); and two semesters of chemistry.

Principles and mechanisms of heredity and gene expression. Considers plant, animal, and microbial organisms.

(Sponsoring Dept.: BSCI).

2121	Kimberly Paczolt Class time/details on ELMs W 10:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
2122	Kimberly Paczolt Class time/details on ELMs Th 4:00pm - 5:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2124	Kimberly Paczolt Class time/details on ELMs Tu 10:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
2125	Kimberly Paczolt Class time/details on ELMs Tu 12:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2129	Kimberly Paczolt Class time/details on ELMs W 10:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion

2130	Kimberly Paczolt Class time/details on ELMs W 3:00pm - 4:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2132	Kimberly Paczolt Class time/details on ELMs W 5:00pm - 6:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2137	Kimberly Paczolt Class time/details on ELMs Th 12:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2141	Kimberly Paczolt Class time/details on ELMs Th 2:00pm - 3:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2211	Thomas Kocher Class time/details on ELMs M 12:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2215	Thomas Kocher Class time/details on ELMs Tu 2:00pm - 3:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2221	Thomas Kocher Class time/details on ELMs Tu 4:00pm - 5:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2231	Thomas Kocher Class time/details on ELMs Tu 6:00pm - 7:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2251	Thomas Kocher Class time/details on ELMs W 12:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
2264	Thomas Kocher Class time/details on ELMs Th 8:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion

2265	Thomas Kocher Class time/details on ELMs Th 2:00pm - 3:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion
2267	Thomas Kocher Class time/details on ELMs Th 4:00pm - 5:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion

BSCI223 **General Microbiology**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: LL | General Education: DSNL, SCIS

Prerequisite: BSCI170 and BSCI171; or BSCI105.

Fundamental concepts in morphology, physiology, genetics, immunology, ecology, and pathogenic microbiology. Applications of microbiology to medicine, the food industry and biotechnology.

(Sponsoring Dept.: CBMG). Students must pay a $40.00 laboratory materials fee.

1101	John Buchner TuTh 11:00am - 11:50am MW 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	Lab
1106	John Buchner TuTh 11:00am - 11:50am MW 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	Lab
1121	John Buchner TuTh 11:00am - 11:50am TuTh 9:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	Lab
1126	John Buchner TuTh 11:00am - 11:50am TuTh 9:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	Lab
1201	John Buchner TuTh 11:00am - 11:50am MW 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	Lab
1206	John Buchner TuTh 11:00am - 11:50am MW 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	Lab

1221	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	TuTh 12:00pm - 1:50pm	ONLINE	Lab
1225	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	TuTh 12:00pm - 1:50pm	ONLINE	Lab
1301	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	MW 2:00pm - 3:50pm	ONLINE	Lab
1306	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	MW 2:00pm - 3:50pm	ONLINE	Lab
1321	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	TuTh 2:00pm - 3:50pm	ONLINE	Lab
1325	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	TuTh 2:00pm - 3:50pm	ONLINE	Lab
1326	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	TuTh 2:00pm - 3:50pm	ONLINE	Lab
1405	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	MW 4:00pm - 5:50pm	ONLINE	Lab
2105	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	MW 10:00am - 11:50am	ONLINE	Lab
2125	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	TuTh 9:00am - 10:50am	ONLINE	Lab

2226	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	TuTh 12:00pm - 1:50pm	ONLINE	Lab
2401	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	MW 4:00pm - 5:50pm	ONLINE	Lab
PDS1	John Buchner	Seats (Total: 20)	
	TuTh 6:00pm - 6:50pm	ONLINE	
	TuTh 7:00pm - 9:00pm	ONLINE	Lab
	Restricted to students in the SIE Program. Click here for more information.		
PDS2	John Buchner	Seats (Total: 20)	
	TuTh 6:00pm - 6:50pm	ONLINE	
	TuTh 7:00pm - 9:00pm	ONLINE	Lab
	Restricted to students in the SIE Program. Click here for more information.		

BSCI238C **Special Topics in Biology Student Initiated Courses; Introduction to R/R Studio for Life Sciences**

Credits: 1 Grading Method: Regular

Student Initiated Course (STIC) in Biology. Course will be student initiated and taught under close supervision of faculty mentor. Student instructor and faculty mentor must generate proposal and have approval of the Biological Sciences Program to offer a BSCI238 STIC. BSCI238 cannot be applied to the degree requirements of any biological sciences major.

Prerequisite: Any statistics course. Restricted to majors in Biological Sciences; Biochemistry, or Public Health Science. Life science majors will be taught the basics of R programming language and how to use R with scientific datasets. The student facilitator is Michelle Fang.

0101	Philip Johnson	Seats (Total: 23)	
	F 1:00pm - 1:50pm	ONLINE	

BSCI238D **Special Topics in Biology Student Initiated Courses; A Primer on Research Kits in the College of Life Sciences**

Credits: 1 Grading Method: Regular

Student Initiated Course (STIC) in Biology. Course will be student initiated and taught under close supervision of faculty mentor. Student instructor and faculty mentor must generate proposal and have approval of the Biological Sciences Program to offer a BSCI238 STIC. BSCI238 cannot be applied to the degree requirements of any biological sciences major.

Prerequisite: BSCI171 and BSCI222. This course will combat the "Kit Mentality" by explaining the "whys" behind the most widely used technologies in the biological research field.

0101	Jonathan Dinman F 5:00pm - 5:50pm	Seats (Total: 25) ONLINE

BSCI279 **Supplemental Study; Supplemental Study in Biology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI279P **Supplemental Study; Undergraduate Teaching Fellows Professional Development Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: BSCI).

Contact department for information to register for this course.

BSCI279Q **Supplemental Study; Readings in Neurophysiology**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: BIOL).

0101	Elizabeth Quinlan, Ricardo Araneda, Daniel Butts Contact instructor or department for details.	Seats (Total: 13)

BSCI279R **Supplemental Study; Undergraduate Research Rotation**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: CBMG).

Contact department for information to register for this course.

BSCI279T **Supplemental Study; BSCI Learning Assistants**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

Contact department for information to register for this course.

BSCI283 **Principles of Microbiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit General Education: DSNL, SCIS

Prerequisite: BSCI207 and BSCI222. Credit only granted for: BSCI223 or BSCI283. Additional information: Priority given to BSCI, BCHM and CHEM majors.

Introduction to microorganisms designed for science majors. Genetic principles underlying microbial abilities; microbial structure-function relationships; metabolism, physiology, and ecology of microorganisms; interactions between microorganisms (including pathogens) and their hosts.

(Sponsoring Dept.: CBMG).

1205	Wade Winkler	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	MW 12:00pm - 1:50pm	ONLINE	Lab
1305	Wade Winkler	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	MW 2:00pm - 3:50pm	ONLINE	Lab

BSCI289 **Off-Campus Internship**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Elective credit for formally established off-campus research internship. Permission of Director of Outreach required.

(Sponsoring Dept.: BSCI). Provides credit for off-campus research internships. This credit counts as elective toward graduation, but does not satisfy any Biological Sciences degree requirements (For information about research credit that does count toward Biological Sciences contact the Biological Sciences Program, room 1322 Symons Hall). The off-campus internship credit requires that a contract form be filed with the Assistant Dean for Science Education Initiatives, Room 1313 Symons Hall, prior to the internship. The contract must be finalized and signed by the research supervisor at the end of the semester before credit will be awarded.

1110	Katerina Thompson	Seats (Total: 20)
	Contact instructor or department for details.	
1111	Katerina Thompson	Seats (Total: 40)
	Contact instructor or department for details.	

BSCI300 **Strategies for Success**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in USG-Universities at Shady Grove; and must be in Biological Sciences: Physiology & Neurobiology program. Credit only granted for: BSCI300 or BSCI339R. Formerly: BSCI339R.

Students often face an increased emphasis on critical thinking, pressure from a typically higher credit hour load, and a faster pace of exposure to new material when moving from lower- to upper-level coursework. The Biological Sciences program designed this course to help all transfer students make successful transitions, both academically and socially, to the University of Maryland at Shady Grove.

ESG1	Annie Foster Ahmed	Seats (Total: 50)
	F 9:30am - 10:20am	ONLINE
	Registration is restricted to Biological Sciences - Shady Grove majors.	

BSCI301 **Physiology of Pain and Evidence-based CAM Approaches**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI170, BSCI171. Restriction: Must be a Biological Science major at Shady Grove.

Introduction to the physiology of pain and the philosophies, techniques, and evidence of efficacy of complementary and alternative therapies used to treat pain/chronic pain disorders, including massage therapy, dietary, mind-body practices, acupuncture, energy therapies, and Ayurvedic practices.

Credit cannot be applied to the requirements of any Biological Sciences major.

ESG1	Sherrie Tennessee	Seats (Total: 45)
	Class time/details on ELMs	ONLINE
	Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci-reg@umd.edu for permission.	

BSCI329 **Instructional Assistance Practicum**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail

Students serve as instructional assistants in selected undergraduate biology courses. Roles and responsibilities are determined on a course- specific basis and approved by the College Undergraduate Program Committee.

Prerequiste: permission of department. (Sponsoring Dept.: BIOL). Credit cannot be applied to the requirements of any Biological Sciences Major.

1016	Hilary Bierman	Seats (Total: 10)
	Contact instructor or department for details.	
1020	Gerald Borgia	Seats (Total: 5)
	Contact instructor or department for details.	
1250	Justicia Opoku-Edusei	Seats (Total: 20)
	Contact instructor or department for details.	
ESG1	Hadiya Woodham	Seats (Total: 8)
	Contact instructor or department for details.	
	Registration is restricted to Biological Sciences - Shady Grove majors.	
ESG2	David Sandstrom	Seats (Total: 5)
	Contact instructor or department for details.	
	Registration is restricted to Biological Sciences - Shady Grove majors.	

BSCI329H **Instructional Assistance Practicum**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Students serve as instructional assistants in selected undergraduate biology courses. Roles and responsibilities are determined on a course- specific basis and approved by the College Undergraduate Program Committee.

2330	Sabrina Kramer, Najib El-Sayed Contact instructor or department for details.	Seats (Total: 20)	

BSCI330 **Cell Biology and Physiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132. And minimum grade of C- in BSCI170 and BSCI171; or minimum grade of C- in BSCI105. Restriction: Must not have completed BSCI230. Credit only granted for: BSCI230 or BSCI330. Formerly: BSCI230.

Biochemical and physiological mechanisms underlying cellular function. Properties of cells which make life possible and mechanisms by which cells provide energy, reproduce, and regulate and integrate with each other and their environment.

(Sponsoring Dept.: BIOL). Specialization Areas: PHNB, CEBG, MICB, ECEV, and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Albert Ades, Carmen Cantemir-Stone Class time/details on ELMs M 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0102	Albert Ades, Carmen Cantemir-Stone Class time/details on ELMs M 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0103	Carmen Cantemir-Stone, Albert Ades Class time/details on ELMs Tu 8:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	 Lab
0104	Albert Ades, Carmen Cantemir-Stone Class time/details on ELMs Tu 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0105	Albert Ades, Carmen Cantemir-Stone Class time/details on ELMs W 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0107	Albert Ades, Carmen Cantemir-Stone Class time/details on ELMs W 6:00pm - 8:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab

0108	Albert Ades, Carmen Cantemir-Stone Class time/details on ELMs Th 8:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	 Lab
0109	Albert Ades, Carmen Cantemir-Stone Class time/details on ELMs Th 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0111	Carmen Cantemir-Stone, Albert Ades Class time/details on ELMs M 6:00pm - 8:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
0114	Carmen Cantemir-Stone, Albert Ades Class time/details on ELMs Th 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1101	Kenneth Frauwirth, Carmen Cantemir-Stone Class time/details on ELMs M 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1102	Kenneth Frauwirth, Carmen Cantemir-Stone Class time/details on ELMs M 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1103	Kenneth Frauwirth, Carmen Cantemir-Stone Class time/details on ELMs Tu 8:30am - 11:20am	Seats (Total: 26) ONLINE ONLINE	 Lab
1104	Carmen Cantemir-Stone, Kenneth Frauwirth Class time/details on ELMs Tu 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1105	Carmen Cantemir-Stone, Kenneth Frauwirth Class time/details on ELMs W 11:00am - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab

1106	Kenneth Frauwirth, Carmen Cantemir-Stone Class time/details on ELMs W 2:00pm - 4:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1107	Kenneth Frauwirth, Carmen Cantemir-Stone Class time/details on ELMs M 6:00pm - 8:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
1108	Kenneth Frauwirth, Carmen Cantemir-Stone Class time/details on ELMs Th 6:00pm - 8:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
ESG1	David Sandstrom, Hadiya Woodham TuTh 11:00am - 12:15pm Th 2:00pm - 4:50pm *Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci-reg@umd.edu for permission.*	Seats (Total: 25) ONLINE BLD4 3322	 Lab
ESG2	David Sandstrom, Hadiya Woodham TuTh 11:00am - 12:15pm Tu 2:00pm - 4:50pm *Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci-reg@umd.edu for permission.*	Seats (Total: 25) ONLINE BLD4 3322	 Lab
PDS1	Elizabeth Read-Connole, Carmen Cantemir-Stone Tu 6:30pm - 9:30pm Th 6:30pm - 9:30pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 26) ONLINE ONLINE	 Lab

BSCI330H **Cell Biology and Physiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132. And minimum grade of C- in BSCI170 and BSCI171; or minimum grade of C- in BSCI105. Restriction: Must not have completed BSCI230. Credit only granted for: BSCI230 or BSCI330. Formerly: BSCI230.

Biochemical and physiological mechanisms underlying cellular function. Properties of cells which make life possible and mechanisms by which cells provide energy, reproduce, and regulate and integrate with each other and their environment.

(Sponsoring Dept.: BIOL). Specialization Areas: PHNB, CEBG, MICB, ECEV and GENB. Restricted to students in the Integrated Life Science Honors program or permission of the instructor. Students must pay a $40.00 laboratory materials fee.

0101	Carmen Cantemir-Stone, Sabrina Kramer MWF 11:00am - 11:50am Tu 2:00pm - 4:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab
0102	Sabrina Kramer, Carmen Cantemir-Stone MWF 11:00am - 11:50am W 2:00pm - 4:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab
0103	Carmen Cantemir-Stone, Sabrina Kramer MWF 11:00am - 11:50am W 6:00pm - 8:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab
0104	Carmen Cantemir-Stone, Sabrina Kramer MWF 11:00am - 11:50am Th 2:00pm - 4:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab

BSCI338B **Special Topics in Biology; Marine Biology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

Prerequisite: BSCI160. (Sponsoring Dept: BIOL). Acceptable towards Biological Sciences Specialization Areas: GENB and ECEV.

0101	Marjorie Reaka TuTh 11:00am - 12:15pm	Seats (Total: 40) ONLINE

BSCI338D **Special Topics in Biology; Complexity of Cancer**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338G **Special Topics in Biology; Seminar on Deregulated Cell Growth in Cancer and Drug Development**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

Prerequisite: BSCI330. (Sponsoring Dept.: BIOL). Acceptable towards Biological Sciences Specialization Areas: PHNB and GENB. This is a seminar-style course meant to give students opportunities to research independently, prepare, and present professional-level lecturesfocusing on topics in cancer biology and on the developments of anti-cancer drugs.

0101	Albert Ades	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

BSCI338I **Special Topics in Biology; Medical Biotechnology & Drug Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338J **Special Topics in Biology; Medical Exploration of HIV/AIDS**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338M **Special Topics in Biology; Human Health and Disease: A Clinical Approach**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338Z **Special Topics in Biology; Field Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept: BIOL). Cannot be used as credit toward the major requirements for any Biological Sciences major. Contact the Biology Department Undergraduate Office for course information.

Contact department for information to register for this course.

BSCI339C **Selected Topics in Biology; Cell Biology Lab**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

Prerequisites: BSCI420. Credit will be granted for BSCI339C or BSCI421. (Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: PHNB, CEBG, and GENB. Students must pay a $40.00 laboratory materials fee.

Contact department for information to register for this course.

BSCI339D **Selected Topics in Biology; Neurobiology of Chemosensory Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

Prerequisite: BSCI353. (Sponsoring Dept.: BIOL). Applicable towards Biological Sciences Specialization areas: GENB, PHNB.

0101	Ricardo Araneda	Seats (Total: 10)
	MW 2:00pm - 3:15pm	BPS 1250

BSCI339W **Selected Topics in Biology; Molecular Neuroethology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

Prerequisite: C- or better in BSCI222 and BSCI353; or permission of the instructor. Sponsoring Dept.:Biol). Acceptable towards Biological Sciences Specialization Areas: GENB (Genetics & Evolution), CEBG, and PHNB. The brain generates a tremendous variety of behaviors, but how it achieves these feats remains largely unknown. This course will focus on the use of molecular genetic approaches to understand the brain circuits underlying behavior.

0101	Scott Juntti	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ONLINE

BSCI339Z **Selected Topics in Biology; Cell Death and Cancer Research Seminar**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

Prerequisite: C- or better in BSCI330. Recommended: Concurrently enrolled in BSCI339I. (Sponsoring Dept: BIOL). Credit cannot be applied to the requirements of any Biological Sciences major. Project-based biology seminar on Cell Death & Cancer. Includes the discussion and presentation of research articles, as well as laboratory projects aimed at the characterization and destruction of cancer cells, with a focus on preventing cancer cell evasion of cell death pathways.

Contact department for information to register for this course.

BSCI348 **Special Topics in Cell Biology and Molecular Genetics**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). May be repeated, but only 3 credits may be applied to major requirements.

Contact department for information to register for this course.

BSCI348A **Special Topics in Cell Biology and Molecular Genetics; Microbiology Undergraduate Teaching Practicum**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). Students will act as Undergraduate Teaching Assistants for BSCI223. Prerequisite: A or B in BSCI223 and permission of instructor. Students must be available for one of the BSCI223 lab periods. Students interested in this teaching/leadership opportunity should contact Dr. John Buchner for application information: This course is applicable for the Enrichment credits required of all Biological Sciences students in majors with 0404 codes. For others this is elective credit. Formerly: BSCI348U.

0101	John Buchner	Seats (Total: 25)	
	F 8:00am - 8:50am	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

BSCI348I **Special Topics in Cell Biology and Molecular Genetics; Infectious Disease Process**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

PDS1	Volker Briken	Seats (Total: 10)
	F 5:00pm - 8:00pm	ONLINE
	Restricted to students in the SIE Program. Click here for more information.	

BSCI348R **Special Topics in Cell Biology and Molecular Genetics; Microbiology Internship**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). This course is an opportunity for students interested in microbiology to pursue a research project in an off-campus lab. The student must see the instructor and complete an information sheet found on the web site, prior to enrolling in the course.

0101	David Straney	Seats (Total: 8)
	Contact instructor or department for details.	

BSCI353 **Principles of Neuroscience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (BSCI207, BSCI330). Corequisite: PHYS122, PHYS142, or PHYS132.

Principles of nervous system function, ranging from molecular and cellular basis of neuron function through nervous system integration.

(Sponsoring Dept.: BIOL). Acceptable toward Bilogical Sciences Specialization Areas: CEBG (Cell Biology), Development, Physiology), and PHNB.

0101	Chan Lin	Seats (Total: 180)	
	TuTh 12:30pm - 1:45pm	ONLINE	

BSCI360 **Principles of Animal Behavior**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106. And BSCI170 and BSCI171; or BSCI105. And BSCI222.

Study of animal behavior with emphasis on its evolution and function. Topics include genetic basis of behavior, communication, aggression, foraging, cooperation, mate selection, and relevance for conservation.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences specialization areas: PHNB, and GENB.

0101	Danielle Adams	Seats (Total: 20)	
	MW 11:00am - 11:50am	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion
0103	Danielle Adams	Seats (Total: 20)	
	MW 11:00am - 11:50am	ONLINE	
	F 11:00am - 11:50am	ONLINE	Discussion

BSCI361 **Principles of Ecology**

Credits: 4 Grading Method: Regular, Pass-Fail

Prerequisite: BSCI160 and BSCI161; or BSCI106. And (MATH130, MATH136, or MATH140).

Basic principles of population, community, and ecosystem ecology. Use of these principles to predict possible consequences of human-caused changes in the environment and to understand the level of uncertainty of those predictions.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: ECEV and GENB.

0101	Nathan Swenson Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Nathan Swenson Class time/details on ELMs W 3:00pm - 3:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Nathan Swenson Class time/details on ELMs W 4:00pm - 4:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

BSCI363 **The Biology of Conservation and Extinction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI361.

Ecology, evolutionary biology, and paleontology will be applied to the study of conservation, species invasions, and extinction.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: ECEV and GENB (Ecology, Behavior & Organismal).

0101	Karen Lips MWF 11:00am - 11:50am	Seats (Total: 35) ONLINE

BSCI370 **Principles of Evolution**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106.

Understanding evolutionary processes in a natural and human environment, including adaptation; DNA sequence, protein, and genome evolution; evolution of developmental mechanisms; mechanisms of evolutionary change (mutation, natural selection, drift); epidemiology; coevolution and biological control; speciation; comparative methods; extinction and conservation; human evolution.

(Sponsoring Dept.: BIOL) Applies to Biological Sciences Specialization Areas: PHNB, GENB, and ECEV.

0101	Gerald Borgia TuTh 2:00pm - 3:15pm	Seats (Total: 60) ONLINE

BSCI378H **Cell Biology and Molecular Genetics Department Honors Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Required seminar for all students participating in departmental honors research program.

(Sponsoring Dept.: CBMG). Restricted to students participating in the CBMG Departmental Honors Program. If you are interested in a CBMG Departmental Honors Research experience, please see the CBMG department web site for detailed information.

Click here for more course information.

0101	Louisa Wu F 2:00pm - 2:50pm	Seats (Total: 19) ONLINE

BSCI379G **Cell Biology and Molecular Genetics Department Research; Research in Cell Biology and Molecular Genetics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

This course is arranged to provide qualified majors an opportunity to pursue research problems under the supervision of a member of the department.

Prequisite: permission of department. See CBMG department Undergraduate office. (Sponsoring Dept: CBMG).

Contact department for information to register for this course.

BSCI379H **Cell Biology and Molecular Genetics Department Honors Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

Student should consult program guidelines. Research project carried out under guidance of faculty advisor.

Corequisite: BSCI378H. Restricted to students participating in the CBMG Departmental Honors Program. (Sponsoring Dept.: CBMG).

Click here for more course information.

Contact department for information to register for this course.

BSCI379L **Cell Biology and Molecular Genetics Department Research; Lab Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

This course is arranged to provide qualified majors an opportunity to pursue research problems under the supervision of a member of the department.

Any combination of 3 credits of BSCI 379G, BSCI 379L, and BSCI 379H can be used to satisfy the enrichment requirement in CEBG, ECEV, MICB, or PHNB or an upper-level elective in GENB. Students must have successfully completed at least one semester in a Cell Biology & Molecular Genetics department research lab before getting permission to take BSCI 379L in the same lab. Students completing at least 4 credits of laboratory research including at east one semester taking BSCI 379L may substitute this experience for one of the two upper-level laboratory courses required to complete any BSCI major.

Contact department for information to register for this course.

BSCI389 **Entomology Department Research**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Credit to be determined by the department. Should be taken during the junior year. Investigations of assigned entomological problems. No more than 4 credit hours of BSCI389 may be applied to the 120 credit hours needed for the Bachelor's degree.

(Sponsoring Dept.: ENTM).

Contact department for information to register for this course.

BSCI389H **Entomology Department Honors Research**

(Perm req)

Credits: 1-2 Grading Method: Regular

(Sponsoring Dept.: ENTM).

Contact department for information to register for this course.

BSCI389L **Entomology Department Research; Lab Research**

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Credit to be determined by the department. Should be taken during the junior year. Investigations of assigned entomological problems. No more than 4 credit hours of BSCI389 may be applied to the 120 credit hours needed for the Bachelor's degree.

Contact department for information to register for this course.

BSCI398H **Biology Department Honors Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Required seminar for all students participating in departmental honors research program.

(Sponsoring Dept. :BIOL).

0101	Alexandra Bely	Seats (Total: 35)
	M 4:00pm - 5:00pm	ONLINE

BSCI399 **Biology Department Research; Biology Department Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research and/or integrated reading in biology under the direction and close supervision of a member of the faculty.

(Sponsoring Dept: BIOL)

Contact department for information to register for this course.

BSCI399H **Biology Department Honors Research**

(Perm req)

Credits: 1-2 Grading Method: Regular

A laboratory research problem; required each semester during honors participation and culminating in an honors thesis.

(Sponsoring Dept: BIOL).

Contact department for information to register for this course.

BSCI399L **Biology Department Research; Biology Lab Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research and/or integrated reading in biology under the direction and close supervision of a member of the faculty.

Contact department for information to register for this course.

BSCI404 **Cell Biology from a Biophysical Perspective**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330. Recommended: PHYS121 and PHYS122; or completion of PHYS131 and PHYS132 recommended. Jointly offered with BIOL704, BIPH7 04. Credit only granted for: BSCI338O, BSCI404, BIOL704, BIOL708O, or BIPH704. Formerly: BSCI338O.

An approach to cell biology by focusing on mechanisms and unifying physical paradigms. It will not assume a great deal of factual biological knowledge, but will expect a background that prepares students to think mechanistically and quantitatively.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: CEBG (Cell Biology), GENB (Cell Biology, Development, Physiology), and PHNB.

0101	Sergei Sukharev	Seats (Total: 15)	
	TuTh 3:30pm - 4:45pm	BPS 1250	

BSCI405 **Population and Evolutionary Genetics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI222; and 1 course with a minimum grade of C- from (MATH131, MATH136, MATH141). Jointly offered w ith BIOL709. Credit only granted for: BSCI405, BSCI339J, or BIOL709C. Formerly: BSCI339J.

Genetic variation within a population provides the basis for future evolution as well as a record of past evolution. The genomics revolution provides data on this variation that, together with mathematical models, allow us to read this record to reconstruct evolutionary trajectories. Examples will focus on hominin and pathogen evolution. In the lab, students will use models to explore how genetic variation (allele frequencies) changes over time and space.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: CEBG (Genetics), ECEV, and (Genetics & Evolution).

0101	Philip Johnson	Seats (Total: 20)	
	MW 11:00am - 11:50am	ONLINE	
	F 11:00am - 12:50pm	ONLINE	Lab

BSCI410 **Molecular Genetics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI222. And must have completed CHEM233; or (CHEM231 and CHEM232).

An advanced genetics course emphasizing the molecular basis of gene structure and function in the context of modern approaches to the genetics of humans and model organisms.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences specialization areas: PHNB, MICB, CEBG, GENB and CMBG.

0101	Stephen Mount	Seats (Total: 140)	
	TuTh 11:00am - 12:15pm	ONLINE	

BSCI411 **Bioinformatics and Integrated Genomics**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI222. Recommended: BSCI410. Credit only granted for: BSCI380 or BSCI411. Formerly: BSCI380.

Computational methods for the study of biological sequence data in comparative biology and evolution. Analysis of genome content and organization. Database searching, pairwise and multiple sequence alignment, phylogenetic, methods, pattern recognition, and functional inference. Functional and comparative genomics approaches.

(Sponsoring Dept.: CBMG). Acceptable to Biological Specialization Areas: CEBG, MICB, and GENB. Studets must pay a $40.00 Laboratory Materials fee.

0101	Brian Pierce, Najib El-Sayed MWF 10:00am - 10:50am M 2:00pm - 4:50pm	Seats (Total: 25) ESJ 1202 PLS 1121	 Lab
0102	Brian Pierce, Najib El-Sayed MWF 10:00am - 10:50am W 2:00pm - 4:50pm	Seats (Total: 25) ESJ 1202 PLS 1121	 Lab

BSCI411H **Bioinformatics and Integrated Genomics**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI222. Recommended: BSCI410. Credit only granted for: BSCI380 or BSCI411. Formerly: BSCI380.

Computational methods for the study of biological sequence data in comparative biology and evolution. Analysis of genome content and organization. Database searching, pairwise and multiple sequence alignment, phylogenetic, methods, pattern recognition, and functional inference. Functional and comparative genomics approaches.

(Sponsoring Dept.: CBMG). Acceptable to Biological Specialization Areas: CEBG, MICB, and GENB. Studets must pay a $40.00 Laboratory Materials fee.

0101	Najib El-Sayed, Brian Pierce MWF 10:00am - 10:50am M 2:00pm - 4:50pm	Seats (Total: 25) ESJ 1202 PLS 1121	 Lab
0102	Najib El-Sayed, Brian Pierce MWF 10:00am - 10:50am W 2:00pm - 4:50pm	Seats (Total: 25) ESJ 1202 PLS 1121	 Lab

BSCI414 **Recombinant DNA Laboratory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI222.

An advanced course offering hands-on experience in performing recombinant DNA experiments. All current molecular biology techniques used for cloning prokaryotic genes, analyzing the gene products, and modifying the genes will be performed. Techniques include isolation of DNA, use of restriction enzymes; cloning procedures, PCR analysis, and Southern hybridizations. Lecture material focuses on interpretation of results generated in the laboratory.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas: PHNB, MICB, CEBG and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Caren Chang	Seats (Total: 25)	
	TuTh 2:00pm - 5:00pm	ONLINE	Lab
ESG1	Harlan King	Seats (Total: 50)	
	TuTh 9:30am - 10:45am	ONLINE	Lab
	F 1:00pm - 5:00pm	ONLINE	Lab
	Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci-reg@umd.edu for permission.		

BSCI415 **Molecular Genetics Laboratory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in BSCI410. Restriction: Junior standing or higher. Credit only granted for: BSCI348G or BSCI415. Formerly: BSCI348G.

Problem solving laboratory organized around extended projects that employ different approaches toward linking gene and function.

(Sponsoring Dept.: CBMG). Specialization Areas: CEBG and GENB. Students must pay a $40.00 laboratory materials fee.

0101	David Straney	Seats (Total: 20)	
	TBA	MCB 3123	Lab

BSCI416 **Human Genetics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: Minimum grade of C- in BSCI410. Recommended: BSCI330.

Approaches to human genetics and applications to biology and medicine focusing on specific human genetic topics using primary research papers as the main resource.

(Sponsoring Dept.: CBMG).

Contact department for information to register for this course.

BSCI420 **Cell Biology Lectures**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330, BSCI222, CHEM231, and CHEM232. Credit only granted for: BSCI420 or BSCI421.

Molecular and biochemical bases of cellular organization and function in eukaryotes.

(Sponsoring Dept: CBMG). Specialization Areas: PHNB, CEBG, and GENB. Cross-listed with BSCI420. Credit only granted for BSCI420 or CBMG688C.

0101	Norma Andrews	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	ONLINE

BSCI422 **Principles of Immunology**

Credits: 3 Grading Method: Regular

Prerequisite: BSCI223 and BSCI222. Recommended: BSCI330. Restriction: Junior standing or higher.

The immune system in health and disease. Presentation and analysis of the cellular and molecular processes that comprise the immune system.

ESG1	Gregory Simon	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	ONLINE
	Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci-reg@umd.edu for permission.	

BSCI424 **Pathogenic Microbiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI223.

The role of bacteria and fungi in the diseases of humans with emphasis upon the differentiation and culture of microorganisms, types of disease, modes of disease transmission, prophylactic, therapeutic, and epidemiological aspects.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas: MICB and GENB (Category 2). Students must pay a $40.00 laboratory materials fee.

0101	Volker Briken, Kenneth Frauwirth TuTh 11:00am - 11:50am MW 11:00am - 12:50pm	Seats (Total: 18) ONLINE MCB 1143	 Lab
0102	Kenneth Frauwirth, Volker Briken TuTh 11:00am - 11:50am MW 1:00pm - 2:50pm	Seats (Total: 18) ONLINE MCB 1143	 Lab

BSCI430 **Developmental Biology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI222 and BSCI330.

Structural, functional and regulatory events and mechanisms that operate during development to produce an integrated, multicellular organism composed of a multitude of differentiated cell types.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: CEBG(Cell Biology), ECEV, GENB (Cell Biology, Development, Physiology) and PHNB.

0101	William Jeffery TuTh 2:00pm - 3:15pm	Seats (Total: 38) ONLINE

BSCI432 **Systems View of Cell Biology**

Credits: 3 Grading Method: Regular

Prerequisite: BSCI330.

An integrated understanding of cell biology based upon reading of literature, discussion of new findings, and quantitative simulations. Exploration of ten topics including Heredity, Curing Diseases, and Synthesizing Life.

(Sponsoring Dept: CBMG). Acceptable toward Biological Sciences Specialization Areas: CEBG (Cell Biology), GENB(Cell Biology).

0101	Antony Jose TuTh 2:00pm - 3:15pm	Seats (Total: 18) ONLINE

BSCI433 **Biology of Cancer**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI222 and BSCI330; or permission of CMNS-Biological Sciences UG Program.

Causes and consequences of neoplastic transformations at the biochemical and cellular levels.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences specialization areas: CEBG, GENB (Cell Biology, Development, Physiology), and PHNB.

0101	Beth Parent	Seats (Total: 50)
	TuTh 9:30am - 10:45am	ONLINE

BSCI437 **General Virology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI222; or permission of CMNS-Biological Sciences UG Program. Restriction: Junior standing or higher.

Discussion of the physical and chemical nature of viruses, virus cultivation and assay methods, virus replication, viral diseases with emphasis on the oncogenic viruses, viral genetics, and characteristics of the major virus groups.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas: GENB, MICB and CEBG.

0101	Margaret Scull	Seats (Total: 60)
	MWF 11:00am - 11:50am	ONLINE

BSCI440 **Mammalian Physiology**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330; and (CHEM231 and CHEM232; or must have completed CHEM233). Or permission of CMNS-Biological Sciences UG Program.

A study of the cardiovascular, hemopoietic, gastrointestinal, renal and respiratory systems. Chemical and endocrine regulation of physiological functions in mammals. Course does not count as an upper level lab for BIOL majors (see BSCI441).

(Sponsoring Dept.: BIOL). Applies to Biological Sciences Specialization Areas: PHNB and GENB. BSCI 440 is a lecture/discussion format course. The laboratory is offered separately as BSCI 441.

0101	Joshua Singer, Colenso Speer MWF 10:00am - 10:50am M 11:00am - 12:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0102	Joshua Singer, Colenso Speer MWF 10:00am - 10:50am M 2:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0103	Joshua Singer, Colenso Speer MWF 10:00am - 10:50am M 2:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0104	Joshua Singer, Colenso Speer MWF 10:00am - 10:50am Th 8:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
1101	Joshua Singer, Colenso Speer MWF 2:00pm - 2:50pm M 11:00am - 12:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
1102	Colenso Speer, Joshua Singer MWF 2:00pm - 2:50pm Tu 8:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
1103	Joshua Singer, Colenso Speer MWF 2:00pm - 2:50pm W 10:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
1104	Colenso Speer, Joshua Singer MWF 2:00pm - 2:50pm W 11:00am - 12:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
ESG1	David Sandstrom MWF 9:30am - 10:45am *Registration is restricted to Biological Sciences - Shady Grove majors.*	Seats (Total: 40) ONLINE	

BSCI441 **Mammalian Physiology Laboratory**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in BSCI440.

Laboratory exercises in experimental mammalian physiology.

(Sponsoring Dept.: BIOL). Applies to Biological Sciences Specialization Areas: PHNB and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Carmen Cantemir-Stone F 12:00pm - 12:50pm Tu 2:00pm - 5:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab
0102	Carmen Cantemir-Stone F 12:00pm - 12:50pm W 3:00pm - 6:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab

BSCI443 **Microbial Physiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI223. And minimum grade of C- in BCHM461; or minimum grade of C- in BCHM463.

Microbial cellular and population growth. Fermentation metabolism, physiology of anaerobiosis, and energy conservation and transformation in bacterial membranes. Efficiency of energy utilization for growth. Membrane structure and transport. Bacterial chemotaxis. Regulation of bacterial chromosome replication, RNA and protein synthesis. Control of metabolic pathways.

(Sponsoring Dept.: CBMG).

0101	Jiqiang Ling MW 11:00am - 12:15pm	Seats (Total: 50) ONLINE

BSCI447 **General Endocrinology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330, CHEM241, and CHEM242.

Functions and dysfunctions of the endocrine system with special reference to mammals.

(Sponsoring DEPT.: BIOL). Specialization Areas: PHNB and GENB.

0101	Justicia Opoku-Edusei MWF 12:00pm - 12:50pm	Seats (Total: 75) ONLINE

BSCI452 **Diseases of the Nervous System**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI330; and minimum grade of C- in BSCI353. Jointly offered with NACS728, BIOL708. Credit only granted for: BSCI452, BSCI338N, BIOL708E, or NACS728N. Formerly: BSCI338N.

An advanced course covering the neuroanatomy, function, and organization of the nervous system and its implication for pathology and disease.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: GENB and PHNB.

0101	Quentin Gaudry TuTh 11:00am - 12:15pm	Seats (Total: 45) ONLINE	

BSCI454 **Neurobiology Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI330; and must have completed or be concurrently enrolled in BSCI353; and must have completed or be concurrently enrolled in PHYS122, PHYS132, or PHYS142.

Basic neuroanatomical techniques, intracellular and extracellular recordings of electrical potentials from nerve and muscle.

(Sponsoring Dept.: BIOL). Specialization areas: CEBG, PHNB, and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Hilary Bierman M 1:00pm - 4:00pm	Seats (Total: 20) ONLINE	Lab
0102	Hilary Bierman Tu 2:00pm - 5:00pm	Seats (Total: 20) ONLINE	Lab
0103	Hilary Bierman W 1:00pm - 4:00pm	Seats (Total: 20) ONLINE	Lab
0105	Hilary Bierman Th 2:00pm - 5:00pm	Seats (Total: 20) ONLINE	Lab

BSCI464 **Microbial Ecology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS

Prerequisite: BSCI223 and CHEM241. And must have completed CHEM243; or CHEM242.

Interaction of microorganisms with the environment, other microorganisms and with higher organisms. Roles of microorganisms in the biosphere. Microorganisms and current environmental problems.

0101	Charles Delwiche MW 3:00pm - 4:15pm	Seats (Total: 14) BPS 1238	

BSCI467 **Freshwater Biology**

Credits: 4 Grading Method: Regular, Pass-Fail

Biology and ecology of freshwater invertebrates in lotic and lentic habitats, their adaptation to aquatic life, their function in aquatic ecosystems, and their relationship to environmental deterioration. Laboratory will include field trips, demonstrations, and identifications.

(Sponsoring Dept.: ENTM). Specialization Areas: ECEV and GENB. Students must pay a $40.00 laboratory materials fee. Online, with optional in-person activities. Contact instructor for details.

0101	William Lamp MWF 1:00pm - 1:50pm W 2:00pm - 4:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab
0102	William Lamp MWF 1:00pm - 1:50pm Th 2:00pm - 4:50pm	Seats (Total: 24) ONLINE ONLINE	 Lab

BSCI471 **Molecular Evolution**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI222; or permission of CMNS-Biology department.

Patterns of DNA sequence variation within and between species, caused by nucleotide changes and the movement of transposable elements. Theories of molecular evolution, such as the neutral theory. Molecular clock hypothesis: its importance as a practical empirical tool in molecular genetics and systematics and its theoretical foundation.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: ECEV and GENB (Genetics & Evolution).

0101	Michael Cummings Class time/details on ELMs	Seats (Total: 25) ONLINE

BSCI475 **Sexual Selection in Nature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI207; or permission of instructor. Recommended: BSCI360 or BSCI370. Jointly offered with BIOL 708. Credit only granted for: BSCI338X, BSCI475, or BIOL708X. Form erly: BSCI338X.

Sexual selection drives some of the most spectacular, if not bizarre, traits in nature. We will explore how organisms select and compete for mates and fertilization success, and how this powerful and pervasive evolutionary force shapes sexual traits and regulates species boundaries. We will focus on the key theories in the field and discuss recent and classic research papers. This is a student-directed class: course topics and materials will be selected based on student interests and involvement. On occasion, experts in the field will be invited to class to discuss their research.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences speciali zation areas: ECEV and GENB (Ecology, Behavioral & Organismal).

0101	Heidi Fisher TuTh 12:30pm - 1:45pm	Seats (Total: 18) ONLINE	

BSCI483 **Insects, Pathogens, and Public Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI207.

Mosquito- and tick-borne disease transmission poses significant challenges to human health and well-being globally, and is on the rise in North America. Arthropod parasites and the pathogens they transmit to humans and animals will be introduced, and the public health significance of these arthropods will be examined. The ecology and behavior of vectors in relation to disease transmission will be emphasized.

(Sponsoring Dept.: ENTM). Online, with optional in-person activities. Contact instructor for details.

0101	Megan Fritz Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Megan Fritz Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion

BSCI494 **Animal-Plant Interactions**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106.

Theoretical, conceptual and applied aspects of evolutionary and ecological interactions between plants and animals. This course gives an overview of major ideas, historical controversies, and current research on animal-plant relationships. We will explore the mechanisms and evolution of plant defenses and animal counter-adaptations, behavioral ecology and interactions across trophic levels, the role of microbial communities in mediating interactions, and how these interactions color human experience through food and medicine. The course will have a blended lecture/discussion format and will include field walks to collect herbivory data and observe animal-plant interactions.

0101	Karin Burghardt TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE
	Online, with optional in-person activities. Contact instructor for details.	

BSCV CIVICUS Fall 2020

BSCV181 Civicus Student and the University

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Freshman standing; and must be in the Civicus program. Credit only granted for: BSOS181 or BSCV181. Formerly: BSOS181.

Knowledge and skills designed to utilize CIVICUS to enhance the college experience and preparation for civic engagement.

0101	Julie Randolph M 2:00pm - 3:45pm	Seats (Total: 27) ONLINE
0201	Julie Randolph M 4:00pm - 5:45pm	Seats (Total: 26) ONLINE

BSCV191 Introduction to Civicus

Credits: 3 Grading Method: Regular

Restriction: Must be in the Civicus program. Credit only granted for: BSCV191 or BSOS191. Formerly: BSOS191.

An introduction to the social and historical foundations of a civil society. An examination of the roles of individuals, groups, social institutions and community services.

0101	Korey Rothman TuTh 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 27) ESJ 2212 ONLINE
0201	Korey Rothman TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 27) ESJ 0215 ONLINE

BSCV301 **Leadership in a Multicultural Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Prerequisite: BSCV191, SOCY105, and BSCV181. Restriction: Sophomore standing or higher. Credit only granted for: BSOS301 or BSCV301. Formerly: BSOS301.

A study and application of skills, historical context, theories, and concepts for constructive leadership in a pluralistic, multicultural, and diverse society. Social science methodologies and theories will provide the structure for the study of contemporary social problems, civil society issues, and leadership practices.

0201	Julie Randolph TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE
0301	Nicole Mehta TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE

BSCV309 **Civicus Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Review and analysis of contemporary social issues.

Contact department for information to register for this course.

BSGC Global Communities Fall 2020

BSGC100 **The Student in the University: Global Communities**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be enrolled in Global Communities Living-Learning Program. By Permission Only (BPO).

Students will develop a sense of community within the program, become familiar with campus resources, gain skills and information to prepare for the Global Experience Semester, and explore the surrounding international community.

0101	Jamila Aswad Tu 9:30am - 10:45am	Seats (Total: 22) ONLINE	
0102	Natalie Vinski Ibrahim Tu 11:00am - 12:15pm	Seats (Total: 22) ONLINE	
0103	Sydnee Garcia Tu 2:00pm - 3:15pm	Seats (Total: 22) ONLINE	

BSGC101 **Globalization**

(Perm req)

Credits: 3 | Grading Method: Regular | CORE: SB | General Education: DSHS, SCIS

Restriction: Must be in Global Communities Living-Learning program.

An interdisciplinary exploration of the historical evolution and contemporary significance of growing interconnectedness in the world. We debate different perspectives on globalization and its impact on social, political, economic and cultural issues.

0101	Virginia Haufler Tu 3:30pm - 4:45pm Th 9:30am - 10:45am	Seats (Total: 22) ONLINE ONLINE	 Discussion
0102	Virginia Haufler Tu 3:30pm - 4:45pm Th 11:00am - 12:15pm	Seats (Total: 22) ONLINE ONLINE	 Discussion
0103	Virginia Haufler Tu 3:30pm - 4:45pm Th 2:00pm - 3:15pm	Seats (Total: 22) ONLINE ONLINE	 Discussion

BSGC302 **BSGC 302 Capstone: Global Connections**

(Perm req)

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Global Communities Living-Learning program. By permission only (BPO). Additional information: This course is limited to second-year students in the Global Communities Living-Learning Program who have completed or are in the midst of completing their Global Experience requirement.

Final component of the Global Communities curriculum. The course connects the global experience with previous BSGC coursework.

Contact department for information to register for this course.

BSGC399 **Topical Investigations in Global Communities**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Variable from 1-3 credits and repeatable up to 6 if content varies.

Restriction: Must be enrolled in Global Communities Living Learning Program.

0101	Virginia Haufler Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 10) ONLINE

BSOS Behavioral and Social Sciences Fall 2020

BSOS201 **Ensuring your Financial Future Through Stock Investing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DSSP, SCIS

Credit only granted for: BSOS289I or BSOS201. Formerly: BSOS289I. Additional information: No prior knowledge of the stock market or investing is expected or required.

Introduces students to investing and trading, with special emphasis on the field of technical analysis. Planning for one's financial future is a critical skill for all students. Students will learn how to evaluate companies using the investors.com website and the TC2000 stock charting program. Students will develop an idea of the risks and benefits of investing, establishing a savings strategy, opening an IRA, and strategically planning for future financial security. In addition to readings, lectures, and online videos, students will participate in virtual stock market trading exercises and manage a virtual account.

FC01	David McCandlish, Eric Wish F 1:00pm - 3:50pm *Restricted to students in Freshmen Connection.*	Seats (Total: 100) ONLINE

BSOS248A **Leadership Seminar I; Ambassadors**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

A topics course in the behavioral and social sciences designed to develop student leaders with skills that will address important issues of the college and offers diverse viewpoints intended to challenge common perceptions of leadership, technology programs and communication.

Contact department for information to register for this course.

BSOS248D **Leadership Seminar I; Dean's Student Advisory Council**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

A topics course in the behavioral and social sciences designed to develop student leaders with skills that will address important issues of the college and offers diverse viewpoints intended to challenge common perceptions of leadership, technology programs and communication.

Contact department for information to register for this course.

BSOS248P **Leadership Seminar I; Peer Mentor Seminar I**

(Perm req)

Credits: 1 Grading Method: Regular

A topics course in the behavioral and social sciences designed to develop student leaders with skills that will address important issues of the college and offers diverse viewpoints intended to challenge common perceptions of leadership, technology programs and communication.

Contact department for information to register for this course.

BSOS258D **Leadership Practicum I; Dean's Student Advisory Council**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

This course puts into practice the elements and skills learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS258L **Leadership Practicum I; DSAC Officers**

(Perm req)

Credits: 1 Grading Method: Regular

This course puts into practice the elements and skills learned in the seminar series that directly benefit the college.

Repeatable to 9 credits.

Contact department for information to register for this course.

BSOS258P **Leadership Practicum I; Peer Mentors**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

This course puts into practice the elements and skills learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS288I **Special Topics in Behavioral and Social Sciences; Internship Practicum in the Social Sciences**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Introductory special topics course focusing on an interdisciplinary topic related to behavioral and social sciences.

Contact department for information to register for this course.

BSOS288V **Special Topics in Behavioral and Social Sciences; Technology Apprentice Program**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introductory special topics course focusing on an interdisciplinary topic related to behavioral and social sciences.

Restricted to BSOS students. Technical skills and pedagogical basics needed to support faculty uses of technology in the classroom. Web publishing, academic website development, creating/using digitized media, electronic presentation tools, and discussion group facilitation. The class will usually meet face-to-face for two and one-half hours per week; however, three or four times per semester, the class will meet online instead. Students will interact and be assessed on their participation in an online environment. For permission to enroll or more information, please contact margaret Weber at mweber@bsos.umd.edu.

Contact department for information to register for this course.

BSOS355 **Social Sciences Internship Practicum**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must have earned a minimum of 60 credits; and minimum cumulative GPA of 2.5; and must have completed at least 1 semester at UMD. Credit only granted for: BSOS388I or BSOS355. Formerly: BSOS388I.

BSOS 355 is an internship course open to all majors. It will enable students to articulate and apply the scholarship from the discipline related to their specific internship placement into a real-work environment.

0101	Kathryn Hopps	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

BSOS358A **Leadership Practicum II; Ambassadors**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

This course puts into practice the advanced skills and elements learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS358P **Leadership Practicum II; Peer Mentors**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

This course puts into practice the advanced skills and elements learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Contact department for information to register for this course.

BSOS388E **Behavioral and Social Sciences Special Topics; CIDCM Minor Practicum**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Contact department for information to register for this course.

BSOS388Q **Behavioral and Social Sciences Special Topics; Cesar Directed Study**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Contact department for information to register for this course.

BSOS399 **Directed Study in Behavioral and Social Sciences**

Credits: 1-6

Grading Method: Regular, Pass-Fail, Audit

Guidance for the advanced student capable of interdisciplinary study on special projects under the supervision of the Assistant Dean for Student Affairs.

Contact department for information to register for this course.

BSOS399T **Directed Study in Behavioral and Social Sciences; Civicus Teaching Assistant**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Guidance for the advanced student capable of interdisciplinary study on special projects under the supervision of the Assistant Dean for Student Affairs.

Contact department for information to register for this course.

BSOS448C **Teaching Assistant Practicum; Civicus**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Supervised practicum for teaching assistants for BSOS/UNIV courses.

Contact department for information to register for this course.

BSOS448I **Teaching Assistant Practicum; Internship**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Supervised practicum for teaching assistants for BSOS/UNIV courses.

Contact department for information to register for this course.

BSOS448T **Teaching Assistant Practicum; (UNIV)**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Supervised practicum for teaching assistants for BSOS/UNIV courses.

Contact department for information to register for this course.

BSST Terrorism Studies Fall 2020

BSST240 **Understanding The Principles and Perils of CBRN Weapons**

Credits: 3 Grading Method: Regular General Education: DSNL (if taken with BSST241), DSNS

Additional information: If taken in the same term as BSST241 these courses will count for General Education Natural Sciences Lab.

Explores the 'dark side' of scientific applications. Students will gain an understanding of CBRN Weapons, through the exploration of the scientific method, and certain fundamental principles of chemistry, biology, and physics. Students will also learn how to test hypotheses, use basic statistics, interpret results, and apply their new knowledge through discussions of practical applications in the domains of public health, emergency management, epidemiology, and threat assessment. Bringing these fields together in one class will allow students to better understand the use of and threat from CBRN weapons in terrorism.

FC01	Steve Sin	Seats (Total: 20)	
	TuTh 4:30pm - 5:45pm	ONLINE	
	Restricted to students in Freshmen Connection.		

BSST241 **Understanding the Principles and Perils of CBRN Weapons (Lab)**

Credits: 1 Grading Method: Regular

Corequisite: BSST240. Additional information: This is an optional 1-credit lab course offered in coordination with BSST240. If taken in the same term as BSST240 these courses will count for General Education Natural Sciences Lab.

An exploration of the threat of Chemical, Biological, Radiological, and Nuclear (CBRN) weapons aimed to provide students with a basic, multidisciplinary, natural science foundation in chemistry, biology, and physics.

Students must also be enrolled in BSST240: Understanding the Principles and Perils of CBRN Weapons

FC01	Steve Sin	Seats (Total: 20)	
	F 10:00am - 12:30pm	ONLINE	Lab
	Restricted to students in Freshmen Connection.		

BSST288R **Special Topics in Terrorism Studies; Global Terrorism in the Twentieth and Twenty-First Century**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

0101	Howard Smead	Seats (Total: 5)
	M 4:00pm - 6:30pm	BPS 1250
	To obtain permission to register for this course, send a copy of your resume and unofficial transcript toeducation@start.umd.edu. Include BSST288R in the subject line of your email.	

BSST327 **Applying Theory to the Practice of Countering Terrorism**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Recommended: BSST330. Restriction: Restricted to students enrolled in the Global Terrorism Minor (#BS07). Credit only granted for: BSST327, BSST377, or BSST399K. Formerly: BSST327. Additional information: It is recommended that this course be taken in the final semester in the minor program.

Focuses on current events related to terrorism and counterterrorism, as they are discussed in mass media, and the implications of those current events on the ethical and professional conduct of the counterterrorism community. Through a discussion-based seminar, students will bring current, terrorism-related events to classroom discussion, where they will consider the media-framed current events in relation to academic research. Students will be continually challenged to draw connections between terrorism-related events in the news and relevant academic research. Furthermore, this class will use vignettes based in current events to present students with real-world ethical dilemmas that those in the professional counterterrorism community and broader national security community have to confront.

0101	William Braniff	Seats (Total: 35)
	Th 3:30pm - 5:10pm	ONLINE

BSST330 **Terrorist Motivations and Behaviors**

Credits: 3 Grading Method: Regular

Restriction: Must be in the Global Terrorism Minor; or special permission available for students in other Global Studies minors.

Theories explaining the formation of terrorist groups and the motivations behind terrorist behavior, building upon theories from social psychology, sociology, political science, criminology, and history. The course examines the different levels of analysis for terrorism studies, the different methods scholars utilize for research, and the most prominent datasets in the field of homeland security. In addition, this course provides a review of various terrorist groups and ideological movements. The course concludes with an introduction to the different approaches to counter violent extremism and terrorism.

0101	Thomas Guarrieri M 4:30pm - 7:15pm	Seats (Total: 40) ONLINE	
	Restricted to students in the Global Terrorism Studies Minor(#BS07); fo inquiries, email education-start@umd.edu.		
0201	Thomas Guarrieri M 4:30pm - 7:15pm	Seats (Total: 5) ONLINE	
	Restricted to students in one of the following minors: International Development & Conflict Mgmt minor (#BS02), Global Poverty minor (#AG06),International Engineering minor (#EN01);or Global Engineering Leadership minor (#EN09); for inquiries, email education-start@umd.edu.		

BSST334 **States of Emergency**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Students will explore the manner in which crises unfold from the perspective of a variety of emergency response disciplines, including: emergency management, law enforcement, intelligence analysis, cyber analysis, risk communication, health and human services, and emergency psychiatry/psychology. Students will participate in a semester-long simulation of an unfolding terrorist attack.

0101	Joseph Oudin Class time/details on ELMs Th 12:30pm - 1:45pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0102	Joseph Oudin Class time/details on ELMs Th 2:00pm - 3:15pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0103	Joseph Oudin Class time/details on ELMs Th 3:30pm - 4:45pm	Seats (Total: 40) ONLINE ONLINE	 Discussion

BSST335 **Innovations in Countering Violent Extremism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

Credit only granted for: BSST335 or BSST338V. Formerly: BSST338V. Additional information: It is recommended that BSST335 be taken after, or concurrent with, BSST330.

Introduces students to novel innovations in the development of Countering Violent Extremism (CVE) programs. CVE is a realm of policy, programs, and interventions designed to prevent individuals from engaging in violence associated with radical political, social, cultural, and/or religious ideologies. Unlike counterterrorism strategies that often focus on targeting and disrupting terrorist plots, CVE focuses on radicalization prevention through engagement and intervention with communities. CVE also focuses on deradicalization and rehabilitation of former extremists. Throughout the course, students will work in groups to develop their own innovative CVE programs, rather than merely learn about CVE through lectures.

Restricted to Global Terrorism Minor students (#BS07).

0101	Thomas Guarrieri	Seats (Total: 40)
	W 1:30pm - 4:15pm	ONLINE

BSST338C **Special Topics in Terrorism Studies; The Hostage Negotiator: Crisis Communication Skills**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

This course is designed to examine the history hostage/crisis communication as an effective tool for law enforcement. The concepts of what constitutes effective communication will be discussed and evaluated. Upon completion of the course, students should possess an understanding of the importance of the basic communication process, how emotions and stress affect this process, and strategies for using crisis communication techniques to improve their personal and professional lives.

ESG1	Edward Pallas	Seats (Total: 35)
	Tu 2:00pm - 4:30pm	Location: TBA
	Restricted to CCJS students at Shady Grove.	

BSST338F **Special Topics in Terrorism Studies; Media in War and Crisis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST338I **Special Topics in Terrorism Studies; Arab-Israeli Relations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST338N **Special Topics in Terrorism Studies; Arms Control in the Nuclear Realm**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST338R **Special Topics in Terrorism Studies; Peace and Conflict Honors Seminar II: Regional Conflicts**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST340 **Oral Communication for National Security Careers**

Credits: 3 Grading Method: Regular General Education: FSOC

Credit only granted for: BSST340 or BSST338E. Formerly: BSST338E.

Students will discuss perspectives on strategic communication and national security, while discussing and practicing public speaking skills and developing proficiency in three genres of security-related briefings. Students will work with the technical, scientific, and/or specialized data, vocabularies, processes, and products of the academic disciplines and/or fields of expertise relevant to national and international security careers.

FC01	Holly Roberts	Seats (Total: 25)
	W 6:00pm - 7:15pm	ONLINE
	Class time/details on ELMs	ONLINE
	Restricted to students in Freshmen Connection.	

BSST386 **Experiential Learning in Terrorism Studies**

(Perm req)

Credits: 1-5 Grading Method: Regular, Pass-Fail

This course will supplement student's experiential learning experience, or internship in the field of terrorism studies and homeland security with guided reflection on their experiences.

0101	Eva Coll	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	Registration by Departmental Permission Only	

BSST399C **Individual Study in Terrorism Studies; Community Resilience Engagement and Dialogue Fellowship Career Development Part 4**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

An independent study course for students in the Global Terrorism Minor program.

Restricted to students in the Community, Resilience, Engagement, and Dialogue Career Development Program.

Contact department for information to register for this course.

BSST630 **Motivations and Intents of Terrorists and Terrorist Groups**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the Terrorism Analysis Graduate Certificate Program. Credit only granted for: BSOS630 or BSST630. Formerly: BSOS630.

Examines motivations for terrorism from an interdisciplinary perspective, with emphasis on political and applied social psychological perspective. Topics may include: defining terrorism; preconditions; recruitment; domestic and international terrorism; and case studies and analysis of terrorist organizations.

ST01	Samuel Henkin	Seats (Total: 35)
	Meets August 31, 2020 - December 14, 2020	
	Tu 6:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BSST634 **Legal and Criminal Approaches to Counterterrorism**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the Graduate Certificate in Terrorism Analysis; or permission of instructor.

The United States and many of her allies have challenged long-standing legal boundaries in their effort to combat terrorism. This course examines these responses, including: increased criminalization of terrorism related activities; aggressive criminal prosecutions; detention of suspected terrorists indefinitely in far-off prisons; implementation of enhanced interrogation techniques; launch of drones to kill alleged terrorists, even U.S. citizens; and deployment of a vast system of mass surveillance.

ST01	Jeffrey Davis	Seats (Total: 30)
	M 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BSST635 **Countering Violent Extremism: Policy and Practice**

Credits: 3 Grading Method: Regular, Audit

In recent years, the understanding of how and why individuals engage in violent extremism and terrorism has evolved and become more nuanced, as have the tools to mitigate these threats. A field of policy and practice called Countering Violent Extremism (CVE) has emerged that focuses on countering the pull of terrorist recruitment and influence by building resilience among populations vulnerable to radicalization.

ST01	Bryan Arva	Seats (Total: 30)
	W 6:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BUAC Accounting and Information Assurance — Fall 2020

All BUAC courses are for MS in Accounting students unless otherwise noted.

BUAC707 **Financial Statement Analysis for Accountants and Auditors**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC780 or BUAC707. Formerly: BUAC780.

Provides students with the tools to conduct a financial statement analysis, which is part of an overall business analysis. This involves understanding and using the information that financial statements are communicating to users.

BUAC707 will meet fully online with synchronous meetings at the listed day/time.

0501	Nick Seybert **Meets August 31, 2020 - October 19, 2020** TuTh 2:00pm - 3:50pm	Seats (Total: 0) ONLINE
0502	Nick Seybert **Meets August 31, 2020 - October 19, 2020** TuTh 9:00am - 10:50am	Seats (Total: 50) ONLINE

BUAC710 **Advanced Managerial Accounting and Control Systems**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC782 or BUAC710. Formerly: BUAC782.

Focuses on topics that emphasize the role of managerial accounting in a firm's overall management planning and control structure. A key concern is to show how effective organizations ensure that the parts of the organization work together to create the whole, and how the sum of the parts, through synergy, can indeed be greater then the whole.

0501	Sebahattin Demirkan **Meets October 26, 2020 - December 15, 2020** MW 10:00am - 11:50am Contact instructor or department for details.	Seats (Total: 0) ONLINE
0502	Sebahattin Demirkan **Meets October 26, 2020 - December 15, 2020** MW 8:00am - 9:50am Contact instructor or department for details.	Seats (Total: 30) ONLINE

BUAC712 **Business Communications for Accountants and Auditors**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC784 or BUAC712. Formerly: BUAC784.

Focuses on the art of communication and its effects on people, organizations, and other stakeholders. The course will focus on two aspects of business communications: persuasion and effective presentations. The objective for the persuasion sessions is to have students improve upon their day-to-day oral business communications skills. This will be accomplished as participants learn to tailor each communication to the person or people with whom they are speaking.

BUAC712 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0501	Samuel Handwerger	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 10:00am - 11:50am	VMH 1330

BUAC721 **Business Law for Managers**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI764 or BUAC721.

Survey of United States legal institutions and processes as well as substantive areas of the law that affect business. Examination of tort and contract law, the legal forms of business organization and legal liability and major regulatory laws that affect business.

0501	Jon Crocker	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	TuTh 6:00pm - 7:50pm	ONLINE
	Class time/details on ELMs	ONLINE

BUAC732 **Intermediate Accounting II**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUAC731. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758M or BUAC732. Formerly: BUAC758M.

Continuing the study of accounting information covering accounting principles found in US GAAP and IFRS as they apply to cash and receivables, inventory valuation, acquisition and disposition of plant, property and equipment, depreciation, impairments and depletion, intangible assets, current liabilities and contingencies, long-term liabilities, and stockholders equity.

0501	Stephen Brown	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	MW 12:00pm - 1:50pm Contact instructor or department for details.	ONLINE

BUAC752 **Internal Auditing I: Conceptual and Institutional Framework**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business. Credit only granted for: BUAC786 or BUAC752. Formerly: BUAC786.

Provides students with an overview and basic understanding of internal auditing. Internal audit's role in internal control, risk management, business processes and risks, and Sarbanes-Oxley, Section 404 compliance efforts compliance efforts are considered. Internal auditing is presented as an integral part of effective corporate governance. Examples of assurance and consulting activities undertaken by the internal audit function, as well as the sourcing strategy (i.e., full insourcing, co-sourcing or full outsourcing models) are discussed. Students are introduced to internal control theory, test design concepts and internal auditing best practices.

BUAC752 will meet fully online with synchronous meetings at the listed day/time.

0501	Elizabeth Folsom, Alan Siegfried	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 6:00pm - 7:50pm	ONLINE

BUAC756 **Informtion Security, Audit and Control**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC790 or BUAC756. Formerly: BUAC790.

Builds on basic information technology (IT) courses, focusing on key issues including IT security, IT controls, and IT auditing. Addressing issues such as auditing a computer information system; assessing risks; identifying control objectives; identifying appropriate audit procedures; learning the concepts and basic features or audit software thereby providing the tools for choosing audit software; conducting an operational audit basic controls over computer information systems; and developing world-class IT control frameworks.

BUAC756 will meet fully online with synchronous meetings at the listed day/time.

0501	David Sites **Meets October 26, 2020 - December 15, 2020** MW 2:00pm - 3:50pm	Seats (Total: 0) ONLINE

BUAC758C **Special Topics in Accounting and Information Assurance; Data Driven Decision Making I**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Maria Bardossy **Meets August 31, 2020 - October 19, 2020** MW 2:00pm - 3:50pm	Seats (Total: 0) VMH 1524
0502	Maria Bardossy **Meets August 31, 2020 - October 19, 2020** MW 8:00pm - 9:50pm	Seats (Total: 50) ONLINE

BUAC758D **Special Topics in Accounting and Information Assurance; Tax VI: State and Local Taxation**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Jeffrey Milton **Meets October 26, 2020 - December 15, 2020** TuTh 6:00pm - 7:50pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUAC758E **Special Topics in Accounting and Information Assurance; Auditing Automation and Analytics**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

BUAC758E will be offered in person with synchronous online streaming for students who cannot attend in person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0501	James McKinney	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	TuTh 4:00pm - 5:50pm	VMH 1330

BUAC758H **Special Topics in Accounting and Information Assurance; Applied Research for Accounting & Auditing**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

BUAC758h will be offered in person with synchronous online streaming for students who cannot attend in person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0501	James McKinney	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	TuTh 4:00pm - 5:50pm	VMH 1330

BUAC758Q **Special Topics in Accounting and Information Assurance; Research on Accounting and Economic Aspects of Cybersecurity**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

BUAC758Q will meet fully online with synchronous meetings at the listed day/time.

0501	Lawrence Gordon	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	TuTh 10:00am - 11:50am	ONLINE

BUAC758S **Special Topics in Accounting and Information Assurance; Systems for Data Analysis**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Woei-Jyh Lee	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	TuTh 12:00pm - 1:50pm	VMH 1528
	Class time/details on ELMs	ONLINE

BUAC758U **Special Topics in Accounting and Information Assurance; Advanced Accounting**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Samuel Handwerger	Seats (Total: 0)
	Meets August 31, 2020 - December 15, 2020	
	MW 2:00pm - 3:15pm	ONLINE
	Contact instructor or department for details.	

BUAC759 **Independent Study in Accounting and Information Assurance**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for masters students in accounting and information assurance.

Contact department for information to register for this course.

BUAC762 **Tax I: Taxation of Individuals**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business.

Federal taxation of individuals focusing on income, exclusions, deductions, depreciation, credits and capital transactions including home ownership. Property coverage includes the tax consequences of sales and dispositions of personal use assets, investment and business assets. Both tax planning and compliance issues are also covered. In addition the course covers waged based and equity-based compensation, taxable and nontaxable benefits as well as deferred compensation and various retirement plans. In addition, students will learn how to utilize regression analysis and scenario analysis to provide additional insights about these tax topics and to forecast future effective tax rates.

BUAC762 will meet fully online with synchronous meetings at the listed day/time.

0501	Leslie Mostow **Meets August 31, 2020 - October 19, 2020** MW 4:00pm - 5:50pm	Seats (Total: 0) ONLINE

BUAC764 **Tax II: Taxation of Corporations & Other Entities**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758V or BUAC764. Formerly: BUAC758V.

Students have the opportunity to gain an understanding of the basic tax competencies required for determining the appropriate tax structure for businesses; issue identification; active listening; solving tax problems.

0501	Jeffrey Milton **Meets October 26, 2020 - December 15, 2020** MW 10:00am - 11:50am Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUAC766 **Taxation of Not-for-Profit Entities**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758W or BUAC766. Formerly: BUAC758W.

An introduction to the theory and practice of taxation as applied in the nonprofit sector. The practice of taxation for nonprofits requires, inter alia, an understanding of the legal framework for these entities. Therefore, the course will devote significant time to understanding the legal environment and framework associated with nonprofits. The course goal is to enable students to become proficient in the major aspects of nonprofits that apply to the work of public accountants.

BUAC766 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0501	Samuel Handwerger **Meets October 26, 2020 - December 15, 2020** TuTh 2:00pm - 3:50pm	Seats (Total: 0) VMH 1330

BUAC770 **Tax V: International Taxation**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758Y or BUAC770. Formerly: BUAC758Y.

An introduction to the theory and practice of international taxation. The objective of the course is to provide students with the basic tools to approach international tax topics from a US perspective. The course addresses the fundamentals of U.S. international taxation, but also offers insight into tax planning considerations. Both the U.S. activities of foreign taxpayers, as well as the foreign activities of U.S. taxpayers are explored.

BUAC770 will be offered in-person with synchronous online streaming for students who canot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0501	Samuel Handwerger	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 12:00pm - 1:50pm	VMH 1330

BUDT Decision and Information Technologies Fall 2020

BUDT758A **Special Topics in Decision, Operations and Information Technologies; Business Communication**

(Perm req)

Credits: 1 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

BUDT758A will meet fully online with synchronous meetings at the listed day/time for each section.

0506	Cary Gillett	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	M 7:00pm - 8:50pm	ONLINE
	For MS in Business Analytics students only.	

0507	Jacqueline Pearce Garrett **Meets August 31, 2020 - October 19, 2020** Th 7:00pm - 8:50pm *For MS in Business Analytics students only.*	Seats (Total: 0) ONLINE
0508	Tricia Homer **Meets August 31, 2020 - October 19, 2020** Th 7:00pm - 8:50pm *For MS in Business Analytics students only.*	Seats (Total: 0) ONLINE

BUDT758B **Special Topics in Decision, Operations and Information Technologies; Big Data and Artificial Intelligence for Business**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

BUDT758B will meet fully online with synchronous meetings at the listed time for each section.

0501	Kunpeng Zhang **Meets August 31, 2020 - December 15, 2020** TuTh 2:00pm - 3:15pm *For MS in Information Systems students only. This course requires a relatively powerful laptop with at least 8 GB of memory and 30 GB of free space on hard drive.*	Seats (Total: 40) ONLINE
0502	Kunpeng Zhang **Meets August 31, 2020 - December 15, 2020** TuTh 3:30pm - 4:45pm *For MS in Information Systems students only. This course requires a relatively powerful laptop with at least 8 GB of memory and 30 GB of free space on hard drive.*	Seats (Total: 38) ONLINE
0503	Kunpeng Zhang **Meets August 31, 2020 - December 15, 2020** TuTh 5:00pm - 6:15pm *For MS in Information Systems students only. This course requires a relatively powerful laptop with at least 8 GB of memory and 30 GB of free space on hard drive.*	Seats (Total: 38) ONLINE

BUDT758D **Special Topics in Decision, Operations and Information Technologies; Data Visualization and Web Analytics**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

For MS in Business Analytics students only. BUDT758D will meet fully online with synchronous meetings at the listed time for each section.

0506	Jessica Clark **Meets August 31, 2020 - December 15, 2020** TuTh 11:00am - 12:15pm	Seats (Total: 0) ONLINE
0507	Lauren Rhue **Meets August 31, 2020 - December 15, 2020** TuTh 12:30pm - 1:45pm	Seats (Total: 0) ONLINE

BUDT758E **Special Topics in Decision, Operations and Information Technologies; Strategic and Transformational IT**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Anand Gopal **Meets October 26, 2020 - December 15, 2020** TuTh 4:00pm - 5:50pm Contact instructor or department for details. *For MS in Information Systems students only.*	Seats (Total: 0) ONLINE

BUDT758G **Special Topics in Decision, Operations and Information Technologies; Managing Digital Business Markets**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Sivakumar Viswanathan **Meets August 31, 2020 - October 19, 2020** MW 6:00pm - 7:50pm Contact instructor or department for details. *For MS in Information Systems students only.*	Seats (Total: 0) ONLINE

BUDT758J **Special Topics in Decision, Operations and Information Technologies; Management of Information Systems**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

Masters in Information Systems only

0501	Paul Shapiro **Meets August 31, 2020 - December 15, 2020** MW 11:00am - 12:15pm *For MS in Information Systems students only.*	Seats (Total: 40) VMH 1212

BUDT758L **Special Topics in Decision, Operations and Information Technologies; Price Optimization & Revenue Management**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

For MS in Business Analytic students only. BUDT758L will meet fully online with synchronous meetings at the listed day/time for each section.

0506	Yi Xu **Meets August 31, 2020 - December 15, 2020** MW 11:00am - 12:15pm	Seats (Total: 0) ONLINE
0507	Yi Xu **Meets August 31, 2020 - December 15, 2020** MW 12:30pm - 1:45pm	Seats (Total: 0) ONLINE

BUDT758M **Special Topics in Decision, Operations and Information Technologies; Healthcare Information Systems**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

For MS in Information Systems students only. BUDT758M will meet fully online with synchronous meetings at the listed day/time.

0501	Melvin Seale W 5:00pm - 7:40pm *For MS in Information Systems students only.*	Seats (Total: 40) ONLINE

BUDT758P **Special Topics in Decision, Operations and Information Technologies; Decision Analytics**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Ilya Ryzhov **Meets August 31, 2020 - December 15, 2020** TuTh 9:30am - 10:45am Contact instructor or department for details. *For MS in Information Systems students only.*	Seats (Total: 42) ONLINE
0506	Sujin Kim **Meets August 31, 2020 - December 15, 2020** MW 3:30pm - 4:45pm Contact instructor or department for details. *For MS in Business Analytics students only.*	Seats (Total: 0) ONLINE

BUDT758Q **Special Topics in Decision, Operations and Information Technologies; Data Models and Decisions**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Sujin Kim **Meets August 31, 2020 - December 15, 2020** MW 2:00pm - 3:15pm Contact instructor or department for details. *For MS in Information Systems students only.*	Seats (Total: 0) ONLINE
0506	Tunay Tunca **Meets August 31, 2020 - December 15, 2020** TuTh 11:00am - 12:15pm *For MS in Business Analytics students only. This section of BUDT758Q will meet fully online with synchronous meetings at the listed day/time.*	Seats (Total: 0) ONLINE

BUDT758W **Special Topics in Decision, Operations and Information Technologies; Capstone Project in Business Analytics**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

BUDT758W will meet both online and in-person with a combination of synchronous and asynchronous content. Synchronous online meetings will take place at the listed day/time with in-person small group meetings to be scheduled on Fridays.

0506	Suresh Acharya **Meets August 31, 2020 - December 15, 2020** Tu 7:00pm - 8:15pm W 7:00pm - 8:15pm Contact instructor or department for details. *For MS in Business Analytics students only.*	Seats (Total: 0) ONLINE ONLINE
0507	Suresh Acharya **Meets August 31, 2020 - December 15, 2020** Tu 7:00pm - 8:15pm W 7:00pm - 8:15pm Contact instructor or department for details. *For MS in Business Analytics students only.*	Seats (Total: 0) ONLINE ONLINE

BUDT758X **Special Topics in Decision, Operations and Information Technologies; Data Processing and Analysis in Python**

(Perm req) Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	John Bono **Meets August 31, 2020 - December 15, 2020** TuTh 6:30pm - 7:45pm *For MS in Information Systems students only. This section of BUDT758X will meet fully online with synchronous meetings at the listed day/time.*	Seats (Total: 0) ONLINE
0506	Woei-Jyh Lee **Meets August 31, 2020 - December 15, 2020** TuTh 9:30am - 10:45am Contact instructor or department for details. *For MS in Business Analytics students only.*	Seats (Total: 0) ONLINE

BUDT758Y **Special Topics in Decision, Operations and Information Technologies; Database Management Systems**

(Perm req) Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Woei-Jyh Lee **Meets August 31, 2020 - December 15, 2020** MW 12:30pm - 1:45pm Contact instructor or department for details. *For MS in Information Systems students only.*	Seats (Total: 0) ONLINE
0506	Woei-Jyh Lee **Meets August 31, 2020 - December 15, 2020** MW 2:00pm - 3:15pm Contact instructor or department for details. *For MS in Business Analytics students only.*	Seats (Total: 0) ONLINE

BUDT759 **Independent Study in Decision and Information Technologies**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for masters students in decision and information technologies.

Contact department for information to register for this course.

BUFN Finance Fall 2020

Courses with the BUFN prefix are offered only for students in the Master of Finance and Master of Quantitative Finance programs.

BUFN610 **Financial Management**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUSI640, BUFN610, or BMGT610.

Focuses on the valuation of the real assets of firms as well as the valuation of stocks and bonds, the primary financial assets in an economy. While details vary, the conceptual foundations of valuation boil down to three themes: time value of money, no-arbitrage, and systematic risk.

BUFN610 will meet fully online with synchronous meetings at the listed day/time

0501	Liu Yang **Meets August 31, 2020 - October 19, 2020** TuTh 10:00am - 11:50am	Seats (Total: 0) ONLINE
0502	Liu Yang **Meets August 31, 2020 - October 19, 2020** TuTh 8:00am - 9:50am	Seats (Total: 0) ONLINE

BUFN620 **Capital Markets**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN740 or BUFN620. Formerly: BUFN740.

Designed to deepen the foundations necessary to finance focused students, especially those intending to specialize in the quantitative areas of finance including investments, fixed income, and financial engineering.

For Master of Finance students only.

0501	Sarah Kroncke **Meets October 26, 2020 - December 15, 2020** TuTh 4:00pm - 5:50pm Contact instructor or department for details.	Seats (Total: 60) ONLINE
0502	Sarah Kroncke **Meets October 26, 2020 - December 15, 2020** TuTh 8:00am - 9:50am Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUFN640 **Financial Data Analytics**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Credit only granted for: BUFN758N of BUFN640. Formerly: BUFN758N.

The course adopts a machine learning mindset to study standard techniques of econometric analysis of financial data. The focus is on understanding, interpretation, and practical applications in Python and Google Colab.

BUFN640 will meet fully online with synchronous meetings at the listed day/time

0501	Serhiy Kozak **Meets August 31, 2020 - October 19, 2020** MW 10:00am - 11:50am	Seats (Total: 0) ONLINE
0502	Serhiy Kozak **Meets August 31, 2020 - October 19, 2020** MW 8:00am - 9:50am	Seats (Total: 0) ONLINE

BUFN650 **Machine Learning in Finance**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN640. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Credit only granted for: BUFN758O or BUFN650. Formerly: BUFN758O.

A hands-on course on applications of cutting-edge machine learning methods to financial modeling. It introduces students to a wide variety of machine learning techniques ranging from lasso regression to deep learning and TensorFlow.

BUFN650 will meet fully online with synchronous meetings at the listed day/time

0501	Serhiy Kozak **Meets October 26, 2020 - December 15, 2020** MW 10:00am - 11:50am	Seats (Total: 0) ONLINE
0502	Serhiy Kozak **Meets October 26, 2020 - December 15, 2020** MW 8:00am - 9:50am	Seats (Total: 0) ONLINE

BUFN712 **Financial Restructuring**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN712 or BUFN752. Formerly: BUFN752.

Focuses on identifying ways to increase firm value through corporate restructuring. Specific topics include: mergers and tender offers, spin-offs, carve-outs, divestitures, takeover defense strategies, leveraged buy-outs, and international acquisitions. Additionally, the theory, practice and empirical evidence related to each of these topics will be covered. Emphasis will be placed on valuation analysis and strategic considerations.

BUFN712 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0501	James Seward **Meets October 26, 2020 - December 15, 2020** MW 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE

BUFN721 **International Investment**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN721 or BUFN770. Formerly: BUFN770.

Addresses international stock markets, portfolio theory, international interest rates, exchange rates and exchange rate derivatives (options, forwards, and futures), exchange rate swaps and exchange rate exposure (operating, translation, and transaction), foreign investment strategy.

BUFN721 will meet fully online with synchronous meetings at the listed day/time.

0501	Vojislav Maksimovic	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 2:00pm - 3:50pm	ONLINE

BUFN730 **Advanced Financial Modeling and Equity Analysis**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Credit only granted for: BUFN760 or BUFN730. Formerly: BUFN760.

Provides in-depth analysis of public equities, with a focus on financial statement analysis, financial forecasting and ultimately valuation. Students will apply the primary valuation techniques used in industry to estimate market values for equities. Additionally, students learn how to stress test their financial models and interpret outcomes.

0501	Sarah Kroncke	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	TuTh 2:00pm - 3:50pm Contact instructor or department for details.	ONLINE

BUFN734 **Portfolio Management**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN734 or BUFN763. Formerly: BUFN763.

Provides training that is important in understanding the investment process - the buy side of the financial world. Specifically, the objective is to provide graduate-level instruction in the following topics, both in theory and in using financial markets data to test the basic theory and practice of portfolio choice and equilibrium pricing models and their implications for efficient portfolios.

0501	Mark Loewenstein **Meets August 31, 2020 - October 19, 2020** TuTh 2:00pm - 3:50pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
0502	Mark Loewenstein **Meets August 31, 2020 - October 19, 2020** TuTh 4:00pm - 5:50pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUFN741 **Advanced Capital Markets**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN620; or permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN758P or BUFN741. Formerly: BUFN758P.

This course covers modern theories and techniques for investments and asset pricing. The main topics covered are: portfolio theory, pricing models, market efficiency, fixed income investment, forwards and futures, and options.

For Master of Quantitative Finance students only. BUFN741 will meet fully online with synchronous meetings at the listed day/time.

0505	Kenneth Fuller **Meets October 26, 2020 - December 15, 2020** TuTh 8:00am - 9:50am	Seats (Total: 50) ONLINE

BUFN742 **Financial Engineering**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Credit only granted for: BUFN742 or BUFN766. Formerly: BUFN766.

Introduces and applies various computational techniques useful in the management of equity and fixed income portfolios and the valuation of financial derivatives and fixed income securities. Techniques include Monte Carlo Simulation and binomial/lattice pricing models. Emphasis is on bridging theory with the design of algorithms and models that can be directly applied in practice.

BUFN742 will meet fully online with synchronous meetings at the listed day/time.

0501	Clifford Rossi **Meets October 26, 2020 - December 15, 2020** TuTh 12:00pm - 1:50pm	Seats (Total: 0) ONLINE

BUFN744 **Fixed Income Derivatives**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610; and BUFN732. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN765 or BUFN744. Formerly: BUFN765.

Surveys fixed income assets and related securities such as Exchange-traded bond options; bonds with embedded options; floating rate notes; caps, collars, and floors; floating rate notes with embedded options. Also surveys advanced tools for interest-rate and fixed-income portfolio management, including the use of derivative securities, and the application of binomial trees for analysis of options, and a sound understanding of stochastic yield curves.

BUFN744 will meet fully online with synchronous meetings at the listed day/time for each section.

0501	Haluk Unal **Meets August 31, 2020 - October 19, 2020** M 6:25pm - 10:00pm	Seats (Total: 0) ONLINE
0502	Haluk Unal **Meets August 31, 2020 - October 19, 2020** Tu 6:25pm - 10:00pm	Seats (Total: 0) ONLINE

BUFN746 **Enterprise and Credit Risk Management**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640; and BUFN740. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H.

Surveys the theory and practice of credit risk identification, measurement and mitigation along with understanding the principles of enterprise risk governance and risk-adjusted returns. The course examines how to develop credit loss distributions via Monte Carlo simulation or copula methodologies for consumer assets such as mortgages, credit cards and auto loans, developing commercial loan scorecards for rating credit risk. Pricing and use of various credit structures such as credit default swaps, collateralized debt obligations and credit-linked notes is examined.

BUFN746 will meet fully online with synchronous meetings at the listed day/time.

0501	Clifford Rossi **Meets October 26, 2020 - December 15, 2020** TuTh 10:00am - 11:50am	Seats (Total: 0) ONLINE

BUFN758A **Special Topics in Finance; Text Mining for Economics and Finance**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in finance.

Students will need to complete the "Python Statistics Essential Training" through LinkedIn Learning if you do not have experience with Python.

0501	Paul Soto **Meets October 26, 2020 - December 15, 2020** M 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
0502	Paul Soto **Meets October 26, 2020 - December 15, 2020** Tu 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUFN758Z **Special Topics in Finance; Global Equity Fund**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN759 **Independent Study in Finance**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in finance.

By Department Permission Only.

Contact department for information to register for this course.

BUFN768A **Special Topics in Finance; Experiential Learning Project**

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768B **Special Topics in Finance; Experiential Learning Project**

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768O **Special Topics in Finance; Experiential Learning Project**

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768P **Special Topics in Finance; Experiential Learning Project**

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768X **Special Topics in Finance; Experiential Learning Project**

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768Y **Special Topics in Finance; Experiential Learning Project**

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BULM Logistics, Business, and Public Policy Fall 2020

Courses with the BULM prefix are offered only for students in the MS in Supply Chain Management program.

BULM700 **Business Fundamentals for Supply Chain Managers I**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BULM758K or BULM700. Formerly: BULM758K.

This course is part of a series of two courses Business Fundamentals for SCM part I and, part II. The series is intended to provide you with the knowledge and skills necessary to quantify the impact of supply chain management decisions on the bottom line. Students will gain a solid understanding of accounting, finance and the link between supply chain and overall financial performance. Students will analyze financial statements and explain the implications of supply chain management decisions on standard financial ratios and all components of the balance sheet and income statement. Through interactive supply chain finance models, students will demonstrate the sensitivity of outcome to multiple independent variables. Last but not least, students will also learn how to apply the net present value technique to evaluate the feasibility of investment projects in supply chain.

0501	Humberto Coronado	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 10:00am - 11:50am	VMH 1524

BULM701 **Business Fundamentals for Supply Chain Managers II**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BULM700; or permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM758Q or BULM701. Formerly: BULM758Q.

This is the second course of the series Business fundamentals for Supply Chain Managers. This course is intended to provide you with the knowledge and skills necessary to quantify the impact of supply chain management decisions on the bottom line. Students will gain a solid understanding of accounting, finance and the link between supply chain and overall financial performance. Students will analyze financial statements and explain the implications of supply chain management decisions on standard financial ratios and all components of the balance sheet and income statement. Through interactive supply chain finance models, students will demonstrate the sensitivity of outcome to multiple independent variables. Last but not least, students will also learn how to apply the net present value technique to evaluate the feasibility of investment projects in supply chain.

0501	Humberto Coronado	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	MW 10:00am - 11:50am	VMH 1524

BULM710 **Data Driven Decision Making I**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI630, BULM758X or BULM710. Formerly: BULM758X.

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

0501	Maria Bardossy	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	TuTh 2:00pm - 3:50pm	VMH 1524

BULM711 **Data Driven Decision Making II**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI630, BULM758Y or BULM711. Formerly: BULM758Y.

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

0501	Maria Bardossy	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	TuTh 2:00pm - 3:50pm	VMH 1524

BULM721 **Global Supply Chain Management**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI672 or BULM721.

Offers a practical blueprint for understanding, building, implementing, and sustaining supply chains in today's rapidly changing global supply chain environment. It will provide the student with a survey of the fast-moving Supply Chain Management discipline and practice, including the evolution of supply chain strategies, business models and technologies; current best practices in demand and supply management; and methodologies for conducting supply chain-wide diagnostic assessments and formulating process improvement plans.

0501	Adams Steven	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	TuTh 10:00am - 11:50am	ONLINE
	Class time/details on ELMs	ONLINE

BULM732 **Networks and Influence**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMO725 or BULM732.

Focuses on networks, social capital, and influence as they relate to operating effectively in organizations. It draws heavily on emerging literature related to social capital and networks, but also integrates concepts from persuasion, communication, and motivation literatures to aid your efforts to build a successful track record for yourself and your organization.

0501	Brodie Riordan	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 2:00pm - 3:50pm	ONLINE
	Contact instructor or department for details.	

BULM742 **Global Supply Chain Resources Planning**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

Provides students with an overall understanding of how firms use an advanced supply chain planning (ASCP) application as an integral part of their materials management process which includes such activities as production planning, materials requirements planning, and distribution requirements planning.

BULM742 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

0501	Philip Evers	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	MW 4:00pm - 5:50pm	VMH 1524

BULM750 **Lean Sigma for Supply Chain I**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM758L or BULM750. Formerly: BULM758L.

This course is part of a series of courses. This the second part of the Lean Six Sigma for SC Managers course series. We will be focusing on the Analyze, Improve and Control phases of the Lean Six Sigma methodology. Lean Six Sigma is a robust methodology for problem solving aiming to improve quality and reduce speed within a process. This course covers up to the Lean and Six Sigma Green Belt level body of knowledge. You will be expected to conduct a project on a case study of a business looking to improve their processes to meet customer requirements.

0501	Jewelyn Harrington	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	M 6:25pm - 10:00pm Contact instructor or department for details.	ONLINE

BULM751 **Lean Sigma for the Supply Chain II**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BULM750. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM758V or BULM751. Formerly: BULM758V.

This course is part of a series of courses. The first part will cover the Introduction, Define and Measure Phases of the Lean Six Sigma Methodology. Lean Six Sigma is a robust methodology for problem solving aiming to improve quality and reduce speed within a process. This course covers up to the Lean and Six Sigma Green Belt level body of knowledge. You will be expected to conduct a project on a case study of a business looking to improve their processes to meet customer requirements.

0501	Jewelyn Harrington	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	M 6:25pm - 10:00pm Contact instructor or department for details.	ONLINE

BULM756 **Supply Chain Strategy**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM758B or BULM756. Formerly: BULM758B.

Examines supply chain management at the strategic level. Through class lectures, case discussions, and assignments, students first learn about the determinants of corporate strategy. Supply chain strategies are then discussed, along with the need to properly align supply chain strategy with corporate strategy. Finally, there is a discussion of how to implement supply chain strategy, given various environmental and market considerations.

0501	Martin Dresner	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	MW 2:00pm - 3:50pm Contact instructor or department for details.	ONLINE

BULM759 **Independent Study in Logistics Management**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in Logistics Management.

Contact department for information to register for this course.

BUMK Marketing Fall 2020

BUMK720 **Marketing Strategy**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUMK758B or BUMK720. Formerly: BUMK758B.

Introduces students to the fundamentals of marketing. This course combines lectures, readings, case analyses and a competitive simulation. A significant part of the course involves a competitive computer-based simulation in which student teams leverage marketing data and metrics to make marketing decisions for an organization that is competing in a market against other student teams in the class.

Courses with the BUMK prefix are offered only for students in the MS in Marketing Analytics program. BUMK720 will meet fully online with synchronous meetings at the listed day/time.

0501	Judy Frels **Meets August 31, 2020 - December 15, 2020** TuTh 3:30pm - 4:45pm	Seats (Total: 0) ONLINE

BUMK724 **Customer Analysis**

(Perm req) Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758D or BUMK724. Formerly: BUMK758D.

Focuses on the analysis of customer decision-making and how marketing strategy can be used to influence those decisions. The framework used is the buyer behavior model, in which concepts from psychology, sociology, and economics are applied to individual and organizational purchase decisions. Marketing strategies of leading firms in consumer products, technology, and services (including internet services) are analyzed using a variety of case study formats.

BUMK724 will meet in a blended format. Online content will be a combination of synchronous and asynchronous work with synchronous meetings at the listed day/time. In person review sessions, consultations, workshops, and/or office hours to be announced by instructor.

0501	Rosellina Ferraro **Meets August 31, 2020 - December 15, 2020** MW 12:30pm - 1:45pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
0502	Rosellina Ferraro **Meets August 31, 2020 - December 15, 2020** MW 2:00pm - 3:15pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUMK726 **Statistical Programming for Customer Analytics**

(Perm req) Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758E or BUMK726. Formerly: BUMK758E.

Provides students with a foundation in probability and statistics with a focus on business applications. It also gives students a foundation for thinking in both likelihood and Bayesian frameworks. The course teaches students the basics of SAS, as well as its use in statistical analysis and statistical programming. Also addressed are basic SAS language structure, data management, OLAP, enterprise miner, statistical analysis, writing procedures.

BUMK726 will meet in a blended format. Online content will be a combination of synchronous and asynchronous work with synchronous meetings at the listed day/time. In person review sessions, consultations, workshops, and/or office hours to be announced by instructor.

0501	Lingling Zhang	Seats (Total: 0)
	Meets August 31, 2020 - December 15, 2020	
	TuTh 2:00pm - 3:15pm Contact instructor or department for details.	ONLINE

BUMK742 Advanced Marketing Analytics

(Perm req) Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758K or BUMK742. Formerly: BUMK758K.

The analysis of marketing data needed for profitable marketing decisions. Advanced methods of marketing analysis for marketing decisions, including choice and count data models, joint analysis of consumers choice, quantity and timing decisions, mixture and mixture regression models, and conjoint analysis, all using data-based cases and SAS software. Applications are in the areas of strategic marketing, marketing segmentation, eye tracking for advertising effectiveness, new product development, sales promotion analysis, pricing, design of marketing mix, and direct marketing.

BUMK742 will meet fully online with synchronous meetings at the listed day/time.

0501	Michel Wedel	Seats (Total: 0)
	Meets August 31, 2020 - December 15, 2020	
	W 7:00pm - 9:40pm	ONLINE

BUMK759 Independent Study in Marketing

(Perm req) Credits: 1-6 Grading Method: Regular

Independent study for Masters students in Marketing.

Contact department for information to register for this course.

BUMK760 **Business Policies and Ethics**

(Perm req) Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758F or BUMK760. Formerly: BUMK758F.

The standards of business conduct, morals and values as well as the role of business in society. Students will consider the sometimes conflicting interests of and claims on the firm and its objectives.

0501	Amna Kirmani **Meets August 31, 2020 - December 15, 2020** Tu 6:00pm - 7:50pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
0502	Amna Kirmani **Meets August 31, 2020 - December 15, 2020** Th 6:00pm - 7:50pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUMK762 **Business Communication I**

(Perm req) Credits: 1 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758H or BUMK762. Formerly: BUMK758H.

A study of the standards of business conduct, morals and values as well as the role of business in society. Students will consider the sometimes conflicting interests of and claims on the firm and its objectives.

0501	Christine Schaaf **Meets October 26, 2020 - December 15, 2020** M 4:00pm - 5:50pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

0502	Christine Schaaf **Meets October 26, 2020 - December 15, 2020** W 4:00pm - 5:50pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUMK766 **Digital Analytics**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758N or BUMK766. Formerly: BUMK758N.

Examines the process of developing, implementing and analyzing strategies for successfully marketing a variety of existing and potential products and services on the Internet. Special attention is devoted to the tools and techniques unique to the electronic media.

BUMK766 will meet in a blended format. Online content will be a combination of synchronous and asynchronous work with synchronous meetings at the listed day/time. In person review sessions and/or office hours to be announced by instructor.

0501	Michael Trusov **Meets October 26, 2020 - December 15, 2020** MW 6:00pm - 7:50pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
0502	Michael Trusov **Meets October 26, 2020 - December 15, 2020** MW 8:00pm - 9:50pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUMK773 **Pricing Analytics and Strategies**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758J or BUMK773. Formerly: BUMK758J.

The economic and behavioral aspects of pricing and the evaluation of innovative pricing practices such as price matching, customized pricing, bundle pricing and product line pricing. The course will cover both B2B, B2C, online and offline markets. Instruction will be through a mix of case studies, pricing simulation games, hands-on exercises, practitioner guest lectures and discussions.

0501	Bo Zhou	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 4:00pm - 5:50pm Contact instructor or department for details.	ONLINE
	This section of BUMK773 will meet in a blended format. Online content will be a combination of synchronous and asynchronous work with synchronous meetings at the listed day/time. In person case discussions and/or office hours to be announced by instructor.	
0502	Bo Zhou	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	TuTh 8:30am - 10:20am Class time/details on ELMs	ONLINE ONLINE
	This section of BUMK773 will meet fully online with synchronous meeting at the listed day/time.	

BUSI Part-Time MBA Program Fall 2020

BUSI600 **Fundamentals of Business Decision Making**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business. Additional information: Pre-work includes the DISC assessment, and a requires a passing grade on a spreadsheet pre-work course.

Introduces students to the language of business. Topics covered include financial accounting, financial management, data models, strategy, leadership and teamwork, and a brief action learning project on innovation.

Meeting Dates: 8/22, 8/23, 8/29 and 8/30 BUSI600 will be offered in-person with online content for students who cannot attend in person.

BA01	Paulo Prochno	Seats (Total: 0)
	Meets August 22, 2020 - September 14, 2020	
	SaSu 8:30am - 5:30pm	Location: TBA

DC01	Paulo Prochno **Meets August 22, 2020 - September 14, 2020** SaSu 8:30am - 5:30pm	Seats (Total: 0) Location: TBA

All BUSI courses are for part-time MBA students unless otherwise noted.

BUSI610 **Introduction to Financial Accounting**

(Perm req) Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUSI610, BUAC602, BUFN602, or BMGT602.

Overview of financial accounting, periodic financial statements and the financial reporting process. Importance of financial statements as information source for creditors and investors and as a means by which managers can communicate information about their firms.

Non majors should review their registration eligibility in the statement preceding the BUSI courses. BUSI610 will be offered primarily online with periodic in-person review sessions.

BA01	Musa Subasi **Meets October 19, 2020 - December 10, 2020** Tu 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
DC01	Michael Kimbrough **Meets October 19, 2020 - December 10, 2020** W 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
DC02	Michael Kimbrough **Meets October 19, 2020 - December 10, 2020** Th 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
GS01	Jeffrey Milton **Meets October 19, 2020 - December 10, 2020** M 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUSI630 **Data Driven Decision Making**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)).

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

BUSI630 will be offered primarily online with perodic in-person review sessions.

BA01	Ashish Kabra **Meets August 31, 2020 - October 15, 2020** Tu 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
DC01	Ashish Kabra **Meets August 31, 2020 - October 15, 2020** W 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
DC02	Ashish Kabra **Meets August 31, 2020 - October 15, 2020** Th 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
GS01	Ashish Kabra **Meets August 31, 2020 - October 15, 2020** M 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUSI631 **Data Driven Decision Making II**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

BUSI631 will meet fully online with synchronous meetings at the listed day/time for each section.

BA01	Gah-Yi Ban **Meets October 19, 2020 - December 10, 2020** Th 6:25pm - 10:00pm	Seats (Total: 0) ONLINE
DC01	Gah-Yi Ban **Meets October 19, 2020 - December 10, 2020** M 6:25pm - 10:00pm	Seats (Total: 0) ONLINE
DC02	Gah-Yi Ban **Meets October 19, 2020 - December 10, 2020** Tu 6:25pm - 10:00pm	Seats (Total: 0) ONLINE
GS01	Gah-Yi Ban **Meets October 19, 2020 - December 10, 2020** W 6:25pm - 10:00pm	Seats (Total: 0) ONLINE

BUSI634 **Operations Management**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI634 or BMGT624.

Operations management is concerned with efficient and effective design and operation of business processes for delivering products and/or services. Emphasis is given to process analysis and design, capacity management and bottlenecks, waiting lines and the impact of uncertainty in process performance, quality management, lean, six-sigma, and revenue management.

BUSI634 will meet fully online with synchronous meetings at the listed day/time for each section.

BA01	Zhi-Long Chen **Meets August 31, 2020 - October 15, 2020** W 6:25pm - 10:00pm	Seats (Total: 0) ONLINE

DC01	Anand Anandalingam **Meets August 31, 2020 - October 15, 2020** M 6:25pm - 10:00pm Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE
DC02	Anand Anandalingam **Meets August 31, 2020 - October 15, 2020** Tu 6:25pm - 10:00pm	Seats (Total: 0) ONLINE
GS01	Zhi-Long Chen **Meets August 31, 2020 - October 15, 2020** Th 6:25pm - 10:00pm	Seats (Total: 0) ONLINE

BUSI662 **Leadership and Teamwork**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BMGT600, BUSI662, or BUSM600.

Course examines concepts of team-building and leadership which are critical to managerial success. Topics include leadership, decision making, communication and conflict, work motivation, building effective teams, and organizational change and culture.

BA01	Gosia Langa Basit **Meets August 31, 2020 - October 15, 2020** Th 6:25pm - 10:00pm Contact instructor or department for details. *This section of BUSI662 will be offered primarily online with periodic in-person review sessions.*	Seats (Total: 0) ONLINE
DC01	Subrahmaniam Tangirala **Meets August 31, 2020 - October 15, 2020** M 6:25pm - 10:00pm Contact instructor or department for details. *This section of BUSI662 will be offered primarily online with periodic in-person review sessions.*	Seats (Total: 0) ONLINE

DC02	Hannah Weiser **Meets August 31, 2020 - October 15, 2020** Tu 6:25pm - 10:00pm Class time/details on ELMs *This section of BUSI662 will meet fully online with synchronous meeting at the listed day/time.*	Seats (Total: 0) ONLINE ONLINE
GS01	Subrahmaniam Tangirala **Meets August 31, 2020 - October 15, 2020** W 6:25pm - 10:00pm *This section of BUSI662 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.*	Seats (Total: 0) BLD2 2032

BUSI683 **The Global Economic Environment**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)).

Relationship between national and international economic environments. Determinants of output, interest rates, prices and exchange rates. Analysis of effect of economic policies (fiscal, monetary, trade, tax) on the firm and the economy.

BUSI683 will be offered primarily online with in-person opportunities to be announced by instructor.

BA01	Cristian Dezso **Meets October 19, 2020 - December 10, 2020** M 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
DC01	Cristian Dezso **Meets October 19, 2020 - December 10, 2020** W 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

DC02	Cristian Dezso **Meets October 19, 2020 - December 10, 2020** Th 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
GS01	Cristian Dezso **Meets October 19, 2020 - December 10, 2020** Tu 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

BUSI690 **Strategic Management**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUSI690 or BMGT614.

Analyze and identify profit opportunities and threats in different industry and competitive environments; Analyze and identify a firm's valuable assets, resources and capabilities and how they might be protected, leveraged, and extended in the market; Learn how to organize your company to be the best prepared to adapt its strategy over time as the market environment changes; and how to use organic growth as well as mergers, acquisitions, joint ventures, alliances, and divestitures to ensure that the firm maintians the proper scale and scope to compete effectively over time.

BA01	Paulo Prochno **Meets August 31, 2020 - October 15, 2020** M 6:25pm - 10:00pm Class time/details on ELMs *This section of BUSI690 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.*	Seats (Total: 0) BA 104 ONLINE
DC01	Paulo Prochno **Meets August 31, 2020 - October 15, 2020** W 6:25pm - 10:00pm Class time/details on ELMs *This section of BUSI690 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.*	Seats (Total: 0) DC C2 ONLINE

DC02	Paulo Prochno	Seats (Total: 0)
	Meets August 31, 2020 - October 15, 2020	
	Th 6:25pm - 10:00pm	ONLINE
	This section of BUSI690 will meet fully online with synchronous meeting at the listed day/time.	
GS01	Evan Starr	Seats (Total: 0)
	Meets August 31, 2020 - October 15, 2020	
	Tu 6:25pm - 10:00pm Class time/details on ELMs	ONLINE ONLINE
	This section of BUSI690 will meet fully online with synchronous meeting at the listed day/time.	

BUSI711 **Industry Analysis**

Credits: 2 Grading Method: Regular

Recommended: BUSI690. Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Conceptual framework and analytical tools for understanding the dynamic of industry structure. Impacts of past and future attractiveness of the industry on profitability. Developing and applying frameworks to devise competitive strategies in uncertain industries.

BUSI711 will be offered in-person with synchronous online streaming for students who cannot attend in-person and to allow for social distancing in reduced capacity classrooms. Contact instructor for details.

BA01	Serguey Braguinsky	Seats (Total: 45)
	Meets August 31, 2020 - October 15, 2020	
	Tu 6:25pm - 10:00pm Contact instructor or department for details.	ONLINE

BUSI712 **Entrepreneurship and New Ventures**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Provides an introduction to important tools and skills necessary to create and grow a successful new venture. Integrates research findings from a range of different practical and intellectual perspectives, including psychology, sociology, economics, strategic management, and history into practical, hands on lessons for an entrepreneur. Class projects provide the foundations for new, real businesses.

BUSI712 will be offered primarily on-line with in-person small group sessions. Contact instructor for details.

DC01	Oliver Schlake **Meets October 19, 2020 - December 10, 2020** Tu 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 45) ONLINE

BUSI713 **Global Strategy**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert , H. Smith School of Business.

Focuses on the "strategic" and "organizational" questions that a company must address as it globalizes its footprint. Among the questions that will be addressed are: What are the potential benefits, costs, and risks associated with going abroad? What differentiates a "global" from a "multidomestic" industry? What are the sources of competitive advantage in a global context?

BUSI713 will be offered primarily online with in-person opportunities to be announced by instructor.

BA01	Anil Gupta **Meets August 31, 2020 - October 15, 2020** W 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 45) ONLINE
GS01	Anil Gupta **Meets August 31, 2020 - October 15, 2020** M 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 45) ONLINE

BUSI718O **Special Topics in Business; Networks and Influence**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

BUSI718O will be offered primarily online with in-person opportunities to be announced by instructor.

DC01	Brodie Riordan	Seats (Total: 35)
	Meets August 31, 2020 - October 15, 2020	
	Th 6:25pm - 10:00pm	ONLINE
	Contact instructor or department for details.	

BUSI731 **Managing Brands and Products**

Credits: 2 Grading Method: Regular

Prerequisite: BUSM612. Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Brand names are valuable assets for firms. Effective brand management is critical to maintaining the long-term profitability of products and services. Topics include understanding brands from the customer's perspective, building brand equity, measuring brand equity, leveraging brand equity, managing brand portfolios and managing brands over time.

BMGT731 will meet fully online with a combination of synchronous and asynchronous content.

GS01	Rosellina Ferraro	Seats (Total: 45)
	Meets August 31, 2020 - October 15, 2020	
	W 6:25pm - 10:00pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSI734 **Digital Marketing**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

It has been a quarter century since the commercial use of the Internet and the World Wide Web began and during that time the business landscape has changed at a frenetic pace. Large multinational corporations such as Alphabet/Google, Facebook, Amazon, Alibaba and eBay, unheard of twenty years ago, have emerged as key players in our modern economy. In 2017 holiday season, online sales increased over 16 percent of overall spending online in 2016 with online retail spending in the U.S., the highest percentage since tracking began in 1999. Sales made through mobile devices have increased at a rapid rate to around 22 to 40 percent of all online sales. Corporations now highlight the importance of creating a digital relationship with customers. Moreover, digital technologies and devices such as smartphones, smart products, the Internet of Things, Artificial Intelligence, and deep learning all promise significant transformations of consumers lives in the near future. It is against this backdrop this course seeks to understand how the developments in digital technology are re-shaping the process and the strategy of marketing in the broad space we call digital marketing.

BUSI734 will be offered primarily online with in-person opportunities to be announced by instructor.

DC01	Pallassana Kannan	Seats (Total: 45)
	Meets August 31, 2020 - October 15, 2020	
	M 6:25pm - 10:00pm	ONLINE
	Contact instructor or department for details.	

BUSI735 **Advanced Marketing Analytics**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI650. Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Introduction to modeling tools used to support marketing analysis and decision making. Applications in strategic marketing, marketing segmentation, new product development, sales promotion analysis, pricing, design of marketing mix, sales force allocation, and direct marketing. Spreadsheet driven cases and illustrative readings.

BUSI735 will meet fully online with synchronous meetings at the listed day/time for each section.

BA01	Michel Wedel	Seats (Total: 45)
	Meets August 31, 2020 - October 15, 2020	
	Th 6:25pm - 10:00pm	ONLINE

BUSI736 **Pricing Strategies for Sustainable Competitive Advantage**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI650. Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Pricing is one of the most important marketing decisions a firm faces. This course will help participants to develop pricing strategies using actual proven concepts, processes and techniques, to align pricing strategies with corporate goals and objectives, to determine the value customers assign to products and services using competitive pricing analysis, and to optimize pricing using customer segmenting strategies. The course will focus on both economic and behavioral aspects of pricing, and evaluation of innovative pricing practices such as price matching, customized pricing, bundle pricing and product line pricing, covering both B2B and B2C markets. Instruction will be through a mix of case studies, pricing simulation games, hands-on exercises and discussions. The course will provide participants with an in-depth understanding of state-of-the-art pricing strategies, practices and techniques for making profitable and sustainable pricing decisions.

BUSI736 will meet fully online with synchronous meetings at the listed day/time for each section.

GS01	Bo Zhou	Seats (Total: 45)
	Meets October 19, 2020 - December 10, 2020	
	M 6:25pm - 10:00pm	ONLINE
	Contact instructor or department for details.	

BUSI737 **Innovation & Product Development**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI650. Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Focuses on the development of innovations, new products or new services from the perspective of a marketer. For an innovation to be successful in the market, it has to be customer centric: hence, in this course, we study how to develop and bring to market elegant and efficient solutions to strong customer needs. This is a fundamental business challenge, faced while working in a startup or in an established company; when developing a new product or a new service; and when serving customers who are individuals or large corporations.

BUSI737 will meet fully online with synchronous meetings at the listed day/time for each section.

BA01	Mary Beth Furst	Seats (Total: 45)
	Meets October 19, 2020 - December 10, 2020	
	Th 6:25pm - 10:00pm	ONLINE
	Class time/details on ELMs	ONLINE

DC01	Mary Beth Furst	Seats (Total: 45)
	Meets October 19, 2020 - December 10, 2020	
	M 6:25pm - 10:00pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSI740 **Valuation in Corporate Finance**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640. Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

An advanced topics course in Corporate Finance dealing with valuation. Main topics will be, building pro forma statements, cost of capital, using ratios and comparables to value projects and firms, discounted cash flow valuations, WACC and APV methods of valuation and Real Option Valuations.

DC01	James Seward	Seats (Total: 45)
	Meets October 19, 2020 - December 10, 2020	
	M 6:25pm - 10:00pm	ONLINE
	Class time/details on ELMs	ONLINE
	This section of BUSI740 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	
GS01	James Seward	Seats (Total: 45)
	Meets October 19, 2020 - December 10, 2020	
	Th 6:25pm - 10:00pm	ONLINE
	Class time/details on ELMs	ONLINE
	This section of BUSI740 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.	

BUSI745 **Fixed Income Analysis**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640. Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Describes important financial instruments which have market values that are sensitive to interest rate movements. Develops tools to analyze interest rate sensitivity and value fixed income securities. Defines and explains the vocabulary of the bond management business.

BUSI745 will meet fully online with synchronous meetings at the listed day/time.

DC01	Haluk Unal	Seats (Total: 45)
	Meets August 31, 2020 - October 15, 2020	
	W 6:25pm - 10:00pm	ONLINE

BUSI751 **Decision Analytics**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI630. Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Analytical modeling for managerial decisions using a spreadsheet environment. Includes linear and nonlinear optimization models, decision making under uncertainty and simulation models.

BUSI751 will meet fully online with synchronous meetings at the listed day/time.

GS01	Ilya Ryzhov	Seats (Total: 45)
	Meets October 19, 2020 - December 10, 2020	
	W 6:25pm - 10:00pm	ONLINE

BUSI758F **Special Topics in Business; Investment Fund Management**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

BUSI758F will be offered primarily online with some in-person small group sessions. Contact instructor for details.

DC01	Kenneth Fuller	Seats (Total: 0)
	Meets August 31, 2020 - December 10, 2020	
	Tu 6:25pm - 10:00pm Contact instructor or department for details.	ONLINE

BUSI758O **Special Topics in Business; Managing Global Business Risks and Opportunities**

Credits: 2 Grading Method: Regular, Sat-Fail

Selected advanced topics in the various fields of graduate study in business.

GX01	Bennet Zelner	Seats (Total: 135)
	Meets October 26, 2020 - December 15, 2020	
	Class time/details on ELMs	ONLINE

BUSI758Q **Special Topics in Business; Business Consulting**

Credits: 4 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

BUSI758Q will be offered primarily online with in-person opportunities to be announced by instructor.

DC01	Nicole Coomber	Seats (Total: 45)
	Meets August 31, 2020 - December 10, 2020	
	W 6:25pm - 10:00pm Contact instructor or department for details.	ONLINE

BUSI759 **Independent Study in Business**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in Business.

Contact department for information to register for this course.

BUSI785 **Project Management in Dynamic Environments**

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

Addresses project management skills that are required by successful managers in increasingly competitive and faster-moving environments. Examines fundamental concepts of successful project management, and the technical and managerial issues, methods, and techniques.

BUSI785 will meet fully online with synchronous meetings at the listed day/time.

DC01	Paul Shapiro	Seats (Total: 45)
	Meets August 31, 2020 - October 15, 2020	
	Tu 6:25pm - 10:00pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSI787 **Integrative Capstone**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

Provide students with an integrative experience to utilize the functional tools amassed in the MBA program and acquire new knowledge in the areas of international business, business ethics and executive/leadership presence, provide students with the opportunity to work with multiple functional areas at a time to drive business growth and utilize cases to address domestic and international challenges, enabling you to sharpen your skills in utilizing several methods for adding economic value when expanding globally. Additionally, students will raise awareness of best practices in building executive/leadership presence, as functional knowledge and business expertise is not enough to ensure successful career progression.

BUSI787 will meet fully online with a combination of synchronous and asynchronous content. Contact instructor for details.

DC01	Cristian Dezso	Seats (Total: 70)
	Meets November 11, 2020 - November 26, 2020	
	SaSu 8:30am - 5:30pm	ONLINE
	Meets 11/14, 11/21, 11/22.	

BUSI799 **Masters Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

BUSM Full-Time MBA Program Fall 2020

Courses with the BUSM prefix are offered only for students in the full- time MBA program.

BUSM600 **Leadership and Teamwork**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BMGT600, BUSI662 or BUSM600.

Course examines concepts of team-building and leadership which are critical to managerial success. Topics include leadership, decision making, communication and conflict, work motivation, building effective teams, and organizational change and culture.

BUSM600 will meet in person at the listed day/time. Course will also be available in an online format for students who cannot attend in person and to allow for social distancing in reduced capacity classrooms.

0101	Neta Moye **Meets August 31, 2020 - December 15, 2020** Tu 11:00am - 12:50pm	Seats (Total: 0) VMH 1524
0201	Neta Moye **Meets August 31, 2020 - December 15, 2020** Th 9:00am - 10:50am	Seats (Total: 40) VMH 1524

BUSM602 **Introduction to Financial Accounting**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI610 or BUSM602.

Overview of financial accounting, periodic financial statements and the financial reporting process. Importance of financial statements as information source for creditors and investors and as a means by which managers can communicate information about their firms.

BUSM602 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Rebecca Hann **Meets August 31, 2020 - October 19, 2020** MW 8:00am - 9:50am Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE
0201	Rebecca Hann **Meets August 31, 2020 - October 19, 2020** MW 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE

BUSM604 **Managerial Economics and Public Policy**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI681 or BUSM604.

Basic microeconomic principles used by firms, including supply and demand, elasticities, costs, productivity, pricing, market structure and competitive implications of alternative market structures. Market failures and government intervention. Public policy processes affecting business operations.

BUSM604 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Rachelle Sampson **Meets August 31, 2020 - October 19, 2020** MW 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE
0201	Rachelle Sampson **Meets August 31, 2020 - October 19, 2020** MW 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE

BUSM606 **Data Driven Decision Making**

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI630 or BUSM606.

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

BUSM606 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Tunay Tunca **Meets August 31, 2020 - December 15, 2020** MW 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE

0201	Tunay Tunca	Seats (Total: 0)
	Meets August 31, 2020 - December 15, 2020	
	MW 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSM610 **Financial Management**

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI640 or BUSM610.

Focuses on the valuation of the real assets of firms as well as the valuation of stocks and bonds, the primary financial assets in an economy. While details vary, the conceptual foundations of valuation boil down to three themes: time value of money, no-arbitrage, and systematic risk.

BUSM610 will meet both in-person and online with a combination of synchronous and asynchronous content. Synchronous meetings will be held at the listed day/time. In-person sessions to be announced by instructor.

0101	Richmond Mathews	Seats (Total: 0)
	Meets August 31, 2020 - December 15, 2020	
	TuTh 9:30am - 10:45am	VMH 1212
0201	Richmond Mathews	Seats (Total: 0)
	Meets August 31, 2020 - December 15, 2020	
	TuTh 11:00am - 12:15pm	VMH 1212

BUSM612 **Marketing Management**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI650 or BUSM612.

Analysis of marketing problems and evaluation of specific marketing efforts regarding the organization's products and services, pricing activities, channel selection, and promotion strategies in both domestic and international markets.

BUSM612 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	Judy Frels **Meets October 26, 2020 - December 15, 2020** MW 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE
0201	Judy Frels **Meets October 26, 2020 - December 15, 2020** MW 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE

BUSM616 **Managerial Accounting**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSI610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI611 or BUSM616.

Use of accounting data in corporate planning and control. Cost-volume- profit analysis, budgeting, pricing decisions and cost data, transfer pricing, activity-based management, performance measures, and standard costing.

BUSM6161 will meet fully online with synchronous meetings at the listed day/time for each section

0101	Eugene Cantor **Meets October 26, 2020 - December 15, 2020** TuTh 2:00pm - 3:50pm	Seats (Total: 0) ONLINE
0201	Eugene Cantor **Meets October 26, 2020 - December 15, 2020** TuTh 4:00pm - 5:50pm	Seats (Total: 0) ONLINE

BUSM621 **Strategic and Transformational IT**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI621 or BUSM621.

Introduces students to the key issues in managing information technolog (IT) and provides an overview of how major IT applications in today's firms support strategic, opertaional, and tactical decisions. Topics include: synchroizing IT and business strategy; the transformational impacts of IT; evaluating and coping with new technologies; governing, managing, and organizing the IT function including outsourcing/offshoring considerations; assessing the business value of IT and justifying IT projects; and managing IT applications in functional areas to support strategy and business process.

BUSM621 will meet in person at the listed day/time. Course will also be available in an online format for students who cannot attend in person and to allow for social distancing in reduced capacity classrooms.

0101	Il-Horn Hann **Meets August 31, 2020 - October 19, 2020** TuTh 4:00pm - 5:50pm	Seats (Total: 0) VMH 1412
0201	Il-Horn Hann **Meets August 31, 2020 - October 19, 2020** TuTh 2:00pm - 3:50pm	Seats (Total: 0) VMH 1412

BUSM706 **Innovation & Product Development**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMO758P or BUSM706.

Focuses on the development of innovations - new products or new services - from the perspective of a marketer. For an innovation to be successful in the market, it has to be customer-centric: hence, in this course, we study how to develop and bring to market elegant and efficient solutions to strong customer needs. This is a fundamental business challenge, faced while working in a startup or in an established company; when developing a new product or a new service; and when serving customers who are individuals or large corporations.

0101	Yogesh Joshi **Meets October 26, 2020 - December 15, 2020** TuTh 10:00am - 11:50am	Seats (Total: 0) VMH 1412

BUSM710 **Advanced Marketing Analytics Models**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM612. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK706 or BUSM705.

Introduction to modeling tools used to support marketing analysis and decision making. Applications in strategic marketing, marketing segmentation, new product development, sales promotion analysis, pricing, design of marketing mix, sales force allocation, and direct marketing. Spreadsheet driven cases and illustrative readings.

BUSM710 will meet fully online with synchronous meetings at the listed day/time.

0101	Jie Zhang	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	MW 2:00pm - 3:50pm	ONLINE

BUSM715 **Digital Marketing**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program OR Permission of BMGT-Robert H. Smith School of Business.

It has been a quarter century since the commercial use of the Internet and the World Wide Web began and during that time the business landscape has changed at a frenetic pace. Large multinational corporations such as Alphabet/Google, Facebook, Amazon, Alibaba and eBay, unheard of twenty years ago, have emerged as key players in our modern economy. In 2017 holiday season, online sales increased over 16 percent of overall spending online in 2016 with online retail spending in the U.S., the highest percentage since tracking began in 1999. Sales made through mobile devices have increased at a rapid rate to around 22 to 40 percent of all online sales. Corporations now highlight the importance of creating a digital relationship with customers. Moreover, digital technologies and devices such as smartphones, smart products, the Internet of Things, Artificial Intelligence, and deep learning all promise significant transformations of consumers lives in the near future. It is against this backdrop this course seeks to understand how the developments in digital technology are re-shaping the process and the strategy of marketing in the broad space we call digital marketing.

0101	Pallassana Kannan	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 2:00pm - 3:50pm	VMH 1330

BUSM738A **Investment Fund Management; Mayer Fund**

(Perm req)

Credits: 3 Grading Method: Regular

Provides second-year Master in Business Administration students with the opportunity to apply the skills learned in finance classes to actual investment decisions through management of an investment fund.

BUSM738A will meet in a combination of online and in-person elements at the listed day/time.

Contact department for information to register for this course.

BUSM741 **Financial Restructuring**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN752 or BUSM741.

Focuses on identifying ways to increase firm value through corporate restructuring. Specific topics include: mergers and tender offers, spin-offs, carve-outs, divestitures, takeover defense strategies, leveraged buy-outs, and international acquisitions. Additionally, the theory, practice and empirical evidence related to each of these topics will be covered. Emphasis will be placed on valuation analysis and strategic considerations.

BUSM741 will meet fully online with a combination of synchronous and asynchronous content. Online synchronous meetings will take place at the listed day/time.

0101	James Seward	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 2:00pm - 3:50pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSM754 **Competitive and Collaborative Negotiation**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMO714 or BUSM754.

Increase negotiating self-confidence and improve capacity to achieve win-win solutions to organizational problems. Improve effectiveness at finding creative solutions to conflict.

BUSM754 will meet fully online with synchronous meetings at the listed day/time.

0101	Vijaya Venkataramani	Seats (Total: 0)
	Meets August 31, 2020 - October 19, 2020	
	MW 12:00pm - 1:50pm	ONLINE

BUSM758B **Special Topics in Business; Financial Stability and Risk Management**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

BUSM758B will meet fully online with synchronous meetings at the listed day/time.

0101	Haluk Unal	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	MW 2:00pm - 3:50pm	ONLINE

BUSM758C **Special Topics in Business; Managing Global Business Risks and Opportunities**

Credits: 2 Grading Method: Regular, Sat-Fail

Selected advanced topics in the various fields of graduate study in business.

GX01	Bennet Zelner	Seats (Total: 135)
	Meets October 26, 2020 - December 15, 2020	
	Class time/details on ELMs	ONLINE

BUSM758N **Special Topics in Business; Managing Change**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

BUSM758N will meet both in-person and online with a combination of synchronous and asynchronous content. Synchronous meetings will be held at the listed day/time. In-person sessions to be announced by instructor.

0101	Myeong-Gu Seo	Seats (Total: 0)
	Meets October 26, 2020 - December 15, 2020	
	MW 12:00pm - 1:50pm Contact instructor or department for details.	ONLINE

BUSM798C **Business Consulting; Technology Entrepreneurship**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Brent Goldfarb **Meets August 31, 2020 - December 15, 2020** W 10:00am - 11:50am	Seats (Total: 0) Location: TBA

BUSO Online MBA Program Fall 2020

BUSO600 **Leadership and Teamwork**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI662, BUSO600 or EMBA656.

Course examines concepts of team-building and leadership which are critical to managerial success. Topics include leadership, decision making, communication and conflict, work motivation, building effective teams, and organizational change and culture.

SO11	Trevor Foulk **Meets August 31, 2020 - October 17, 2020** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO12	Trevor Foulk **Meets August 31, 2020 - October 17, 2020** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO13	Gosia Langa Basit **Meets August 31, 2020 - October 17, 2020** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO14	Gosia Langa Basit **Meets August 31, 2020 - October 17, 2020** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

SO15	Nicole Coomber, Malav Parekh **Meets August 31, 2020 - October 17, 2020** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO16	Nicole Coomber, Malav Parekh **Meets August 31, 2020 - October 17, 2020** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO17	Trevor Foulk **Meets August 31, 2020 - October 17, 2020** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO18	Trevor Foulk **Meets August 31, 2020 - October 17, 2020** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

BUSO601 **Corporate Finance I**

Credits: 2 Grading Method: Regular

Prerequisite: BUSO602. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

Introductory course in corporate financial management. The course outlines the financial concepts and techniques used to evaluate corporate decisions. The topics include the time value of money, valuation of common securities, capital budgeting methods, and discounted cash flow. The objectives are to introduce the language and structure of finance and to develop the ability to analyze financial decisions.

SO11	Ceyed Baiju **Meets October 19, 2020 - December 12, 2020** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

SO12	Ceyed Baiju **Meets October 19, 2020 - December 12, 2020** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO13	Elinda Kiss **Meets October 19, 2020 - December 12, 2020** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO14	Elinda Kiss **Meets October 19, 2020 - December 12, 2020** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO15	Ceyed Baiju **Meets October 19, 2020 - December 12, 2020** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO16	Ceyed Baiju **Meets October 19, 2020 - December 12, 2020** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO17	Joel Naroff **Meets October 19, 2020 - December 12, 2020** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO18	Joel Naroff **Meets October 19, 2020 - December 12, 2020** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

BUSO602 **Financial Accounting**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: EMBA610 or BUSO602.

Overview of financial accounting, periodic financial statements and the financial reporting process. Importance of financial statements as information source for creditors and investors and as a means by which managers can communicate information about their firms.

SO11	Stephen Brown **Meets August 31, 2020 - October 17, 2020** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO12	Stephen Brown **Meets August 31, 2020 - October 17, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO13	William Ford **Meets August 31, 2020 - October 17, 2020** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO14	William Ford **Meets August 31, 2020 - October 17, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO15	Progyan Basu **Meets August 31, 2020 - October 17, 2020** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

SO16	Progyan Basu **Meets August 31, 2020 - October 17, 2020** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO17	Jeffrey Milton **Meets August 31, 2020 - October 17, 2020** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO18	Jeffrey Milton **Meets August 31, 2020 - October 17, 2020** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

BUSO614 **Strategic Management**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI690, BUSM614 or BUSO614.

Analyze and identify profit opportunities and threats in different industry and competitive environments; Analyze and identify a firm's valuable assets, resources and capabilities and how they might be protected, leveraged, and extended in the market; Learn how to organize your company to be the best prepared to adapt its strategy over time as the market environment changes; and how to use organic growth as well as mergers, acquisitions, joint ventures, alliances, and divestitures to ensure that the firm maintians the proper scale and scope to compete effectively over time.

SO31	Melanie Cohen **Meets October 19, 2020 - December 12, 2020** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO32	Melanie Cohen **Meets October 19, 2020 - December 12, 2020** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE

SO33	Paulo Prochno **Meets October 19, 2020 - December 12, 2020** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO34	Paulo Prochno **Meets October 19, 2020 - December 12, 2020** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO35	Clarence Wesley **Meets October 19, 2020 - December 12, 2020** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO36	Clarence Wesley **Meets October 19, 2020 - December 12, 2020** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE

BUSO700 **Fundamentals of Business**

Credits: 2 Grading Method: Sat-Fail

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business.

This course introduces students to the language of business. Topics covered include financial accounting, financial management, data models, strategy, leadership and teamwork, and a brief action learning project on innovation. Pre-work includes the DISC assessment, and a requires a passing grade on a spreadsheet pre-work course.

SO91	Paulo Prochno **Meets August 20, 2020 - August 22, 2020** Class time/details on ELMs	Seats (Total: 100) ONLINE

BUSO701 **Integrative Business Capstone**

Credits: 2 Grading Method: Sat-Fail

Prerequisite: Students must have completed a minimum of 48 credit hours. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

This is an experiential course that involves an integrative business experience. This experience may be simulated through a software package or through content, speakers and events that are based in a realistic business setting. Students compete in teams. Each team makes decisions in areas such as human resources, compensation packages, geographic expansion through sales offices, debt versus equity financing, manufacturing and inventory management, marketing, including pricing, advertising and product design. The impact of each of these decisions flows through the three financial statements and results in financial outcomes and ratios that measure the success of each team. Additional metrics include stakeholders beyond investors such as employee morale, community engagement, and environmental impact. Students compete for financing and for customers. Multiple presentations are made by students during the simulation to explain their strategy, their tactics, and their planned investments.

SO92	Cristian Dezso	Seats (Total: 100)
	Meets December 18, 2020 - December 20, 2020	
	Class time/details on ELMs	ONLINE

BUSO706 **Organizational Change**

Credits: 2 Grading Method: Regular

Prerequisite: BUSM600; or BUSO600; or BUSI662; or EMBA656. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSO706 or BUSM755.

Develops the advanced knowledge and skills of MBA students who plan to work with organizations as change agents. Concrete and useful strategies, tools, and interventions for diagnosing organizational change situations, analyzing problems, and designing and implementing organizational change. Draws on literature from organizational behavior, human resource management and strategic management to identify models as prescriptions of change.

SO31	Sheetal Singh	Seats (Total: 23)
	Meets August 31, 2020 - October 17, 2020	
	W 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

SO32	Sheetal Singh **Meets August 31, 2020 - October 17, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO33	Adina Dabu **Meets August 31, 2020 - October 17, 2020** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO34	Adina Dabu **Meets August 31, 2020 - October 17, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO35	Myeong-Gu Seo **Meets August 31, 2020 - October 17, 2020** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO36	Myeong-Gu Seo **Meets August 31, 2020 - October 17, 2020** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

BUSO712 **Entrepreneurship**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

Introduces students to tools and skills needed to create and grow a successful new venture. The course integrates research findings from a range of different practical and intellectual perspectives, including psychology, sociology, economics, strategic management, and history into practical, hands on lessons for an entrepreneur. Class projects teach skills to explore high-risk business ideas in inexpensive ways and allow students to experience the entrepreneurial environment.A startup is an organization formed to search for a repeatable and scalable business model (Steve Blank). Entrepreneurship is about pursuing hunches about solutions to customer problems and thereby creating value. Testing these hunches requires getting customers to evaluate solutions. It is difficult to attract resources (either human or financial) before it is known if the hunch is correct, but testing hunches requires resources. This course provides iterative tools to solve this chicken and egg problem. We will also focus on specific skill building exercises, such as pitching and networking.

SO11	Brent Goldfarb **Meets October 19, 2020 - December 12, 2020** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO12	Brent Goldfarb **Meets October 19, 2020 - December 12, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 16) ONLINE ONLINE
SO13	Azi Gera **Meets October 19, 2020 - December 12, 2020** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO14	Azi Gera **Meets October 19, 2020 - December 12, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO15	David Kirsch **Meets October 19, 2020 - December 12, 2020** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

SO16	David Kirsch **Meets October 19, 2020 - December 12, 2020** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 18) ONLINE ONLINE
SO17	Le-Marie Thompson **Meets October 19, 2020 - December 12, 2020** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO18	Le-Marie Thompson **Meets October 19, 2020 - December 12, 2020** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

BUSO731 **Social Media and Web Analytics**

Credits: 2 Grading Method: Regular

Prerequisite: BUSM612; or BUSO612; or BUSI650. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758O, BUSO731 or BUSM716.

Examines the process of developing, implementing, and analyzing strategies for successfully marketing a variety of existing and potential products and services using electronic media. Besides well-established Internet marketing tools such as e-mail, search engines and display advertising, a substantial part of the course is dedicated to understanding social media, analyzing successful social media strategies, and tracking their effectiveness. The course offers hands-on experience with many popular as well as emerging techniques unique to electronic media. Special attention is given to metrics appropriate for the new media.

SO51	Sivakumar Viswanathan **Meets October 19, 2020 - December 12, 2020** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

SO52	Sivakumar Viswanathan **Meets October 19, 2020 - December 12, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO61	Sivakumar Viswanathan **Meets October 19, 2020 - December 12, 2020** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

BUSO751 **Supply Chain Risk Management**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM734, BUSM784 or BUSO751.

Supply chain managers are facing an increasingly volatile operating environment, with constant danger of trading community disruption from business, social and environmental risks. Students are provided with a working knowledge of both the core techniques of supply chain risk assessment and mitigation; as well as best practices in establishing formal corporate supply chain risk management programs. A semester-long X-Treme Supply Chain Simulation will enable students to gain hands-on experience in navigating a computer company through a complex and risky four quarters of global business operations.

SO51	Sandor Boyson **Meets October 19, 2020 - December 12, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO61	Sandor Boyson **Meets October 19, 2020 - December 12, 2020** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

BUSO758A **Special Topics in Business; Marketing Analytics**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

SO51	Yogesh Joshi **Meets October 19, 2020 - December 12, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO61	Yogesh Joshi **Meets October 19, 2020 - December 12, 2020** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

BUSO758B **Special Topics in Business; Managing Global Business Risks and Opportunities**

Credits: 2 Grading Method: Regular, Sat-Fail

Selected advanced topics in the various fields of graduate study in business.

GX01	Bennet Zelner **Meets October 26, 2020 - December 15, 2020** Class time/details on ELMs	Seats (Total: 135) ONLINE

BUSO758G **Special Topics in Business; Financial Restructuring**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

SO51	James Seward **Meets October 19, 2020 - December 12, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO61	James Seward **Meets October 19, 2020 - December 12, 2020** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

BUSO758J **Special Topics in Business; Corporate Finance II**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

SO31	Ceyed Baiju **Meets August 31, 2020 - October 17, 2020** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 21) ONLINE ONLINE
SO32	Ceyed Baiju **Meets August 31, 2020 - October 17, 2020** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 21) ONLINE ONLINE
SO33	Elinda Kiss **Meets August 31, 2020 - October 17, 2020** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 21) ONLINE ONLINE
SO34	Elinda Kiss **Meets August 31, 2020 - October 17, 2020** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 21) ONLINE ONLINE
SO35	Ceyed Baiju **Meets August 31, 2020 - October 17, 2020** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 21) ONLINE ONLINE
SO36	Ceyed Baiju **Meets August 31, 2020 - October 17, 2020** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 21) ONLINE ONLINE

BUSO782 **Financial Planning and Control Systems for Managers and Consultants**

Credits: 2 Grading Method: Regular

Prerequisite: Permission of BMGT-Robert H. Smith School of Business. Or BUSO616; and BUSO602. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BMGT711 or BUSO782. Formerly: BMGT711.

This course provides an analysis of several topics concerning financial planning/control systems (management accounting systems). Topics covered: design and use of cost management systems (including activity based costing systems), financial performance measures for enhancing firm value, managerial incentive contracts and accounting data, management accounting and Internet-based transactions, managing earnings and financial ratios, use of balanced scorecard to evaluate financial/nonfinancial managerial performance, management accounting systems and competitor analysis, behavioral aspects of budgeting, post-auditing of capital investments, accounting/economics aspects of information security, and transfer pricing.

SO51	Lei Zhou **Meets October 19, 2020 - December 12, 2020** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO61	Lei Zhou **Meets October 19, 2020 - December 12, 2020** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 16) ONLINE ONLINE

CBMG Cell Biology & Molecular Genetics Fall 2020

CBMG688A **Special Topics in Cell Biology and Molecular Genetics; Research Experiences**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0201	Stephen Mount Class time/details on ELMs	Seats (Total: 20) ONLINE

CBMG688C **Special Topics in Cell Biology and Molecular Genetics**

Credits: 3 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

Jointly offered with BSCI420. Credit only granted for BSCI420 or CBMG688 C.

0101	Norma Andrews	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	ONLINE

CBMG688D **Special Topics in Cell Biology and Molecular Genetics; Genetics: Cell Biology I - Structure and Function**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Sougata Roy, Wenxia Song	Seats (Total: 30)
	Meets October 19, 2020 - December 14, 2020	
	TuTh 4:00pm - 6:00pm	ONLINE

CBMG688J **Special Topics in Cell Biology and Molecular Genetics; Genetics: Immunology and Host Defense**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	David Mosser, Roy Mariuzza	Seats (Total: 12)
	Meets August 31, 2020 - October 16, 2020	
	MW 4:00pm - 6:00pm	ONLINE

CBMG688K **Special Topics in Cell Biology and Molecular Genetics; Genetics: Molecular Virology**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Jeffrey DeStefano, Margaret Scull **Meets October 19, 2020 - December 14, 2020** MW 3:00pm - 5:00pm	Seats (Total: 20) ONLINE

CBMG688M **Special Topics in Cell Biology and Molecular Genetics; Microbial Genetics**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Daniel Stein, Vincent Lee **Meets October 19, 2020 - December 14, 2020** MW 8:00am - 9:50am	Seats (Total: 10) BRB 3101

CBMG688N **Special Topics in Cell Biology and Molecular Genetics; Write Science Using the Movies**

(Perm req)

Credits: 2 Grading Method: Regular

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Antony Jose **Meets August 31, 2020 - October 16, 2020** TuTh 4:00pm - 6:00pm	Seats (Total: 10) ONLINE

CBMG688P **Special Topics in Cell Biology and Molecular Genetics; Programming for Biology**

Credits: 2 Grading Method: Regular

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Stephen Mount, Najib El-Sayed **Meets October 19, 2020 - December 14, 2020** MW 2:00pm - 3:50pm	Seats (Total: 30) ONLINE

CBMG688Q **Special Topics in Cell Biology and Molecular Genetics; Responding to Current and Emerging Pathogens**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Peter Hobart, Kenneth Frauwirth **Meets October 19, 2020 - December 14, 2020** TuTh 4:00pm - 6:00pm	Seats (Total: 15) ONLINE

CBMG688Y **Special Topics in Cell Biology and Molecular Genetics; Bioinformatics and Genomics**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Michael Cummings, Najib El-Sayed **Meets August 31, 2020 - October 16, 2020** TuTh 9:00am - 10:50am	Seats (Total: 24) ONLINE

CBMG699 **Special Problems in Cell Biology and Molecular Genetics**

Credits: 1-3 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

Contact department for information to register for this course.

CBMG699D **Special Problems in Cell Biology and Molecular Genetics; Molecular Genetics: Bioinformatics and Computation Biology**

Credits: 1 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

0101	Stephen Mount Class time/details on ELMs	Seats (Total: 20) ONLINE

CBMG699K **Special Problems in Cell Biology and Molecular Genetics; Biological Sciences Teaching and Learning in Higher Education**

(Perm req)

Credits: 2 Grading Method: Regular

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

Cross-listed with BIOL608K, CHEM608K, and ENTM699K. Credit will be grant edfor only one of the following: BIOL608K, CBMG699K, CHEM608K, or ENTM699K.

0101	Gili Ad-Marbach	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

CBMG699X **Special Problems in Cell Biology and Molecular Genetics; Host Pathogen Interactions**

Credits: 1 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

0101	David Mosser	Seats (Total: 20)
	F 9:00am - 10:30am	ONLINE

CBMG699Y **Special Problems in Cell Biology and Molecular Genetics; Plant Cell Biology Journal Club**

Credits: 1 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

0101	Zhongchi Liu	Seats (Total: 20)
	M 11:00am - 12:00pm	ONLINE

CBMG699Z **Special Problems in Cell Biology and Molecular Genetics; Protein Translation**

Credits: 1 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

0101	Jonathan Dinman	Seats (Total: 20)
	F 9:30am - 10:30am	ONLINE

CBMG799 **Masters Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Master's Thesis Research in Cell Biology and Molecular Genetics.

Contact department for information to register for this course.

CBMG898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Pre-candidacy Research.

Contact department for information to register for this course.

CBMG899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Doctoral Dissertation Research.

Contact department for information to register for this course.

CCJS Criminology and Criminal Justice Fall 2020

CCJS100 **Introduction to Criminal Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Introduction to the administration of criminal justice in a democratic society, with emphasis on the theoretical and historical development of law enforcement. The principles of organization and administration for law enforcement; functions and specific activities; planning and research; public relations; personnel and training; inspection and control; direction; policy formulation.

0101	Justine Madoo Class time/details on ELMs M 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Justine Madoo Class time/details on ELMs M 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0103	Justine Madoo Class time/details on ELMs M 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

0104	Justine Madoo Class time/details on ELMs M 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0105	Justine Madoo Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0106	Justine Madoo Class time/details on ELMs W 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0107	Justine Madoo Class time/details on ELMs W 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0108	Justine Madoo Class time/details on ELMs W 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0201	Justine Madoo Class time/details on ELMs Tu 9:30am - 10:20am	Seats (Total: 30) ONLINE ONLINE	Discussion
0202	Justine Madoo Class time/details on ELMs Tu 8:30am - 9:20am	Seats (Total: 30) ONLINE ONLINE	Discussion
0203	Justine Madoo Class time/details on ELMs Tu 12:30pm - 1:20pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0204	Justine Madoo Class time/details on ELMs Tu 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0205	Justine Madoo Class time/details on ELMs Th 8:30am - 9:20am	Seats (Total: 30) ONLINE ONLINE	Discussion

0206	Justine Madoo Class time/details on ELMs Th 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0207	Justine Madoo Class time/details on ELMs Th 9:30am - 10:20am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0208	Justine Madoo Class time/details on ELMs Th 12:30pm - 1:20pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
FC01	Kyle Dorsey Class time/details on ELMs *Restricted to students in Freshman Connection.*	Seats (Total: 40) ONLINE	

CCJS105 **Introduction to Criminology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Criminal behavior and the methods of its study; causation; typologies of criminal acts and offenders; punishment, correction and incapacitation; prevention of crime.

0101	Jessica Miller Class time/details on ELMs M 9:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Jessica Miller Class time/details on ELMs M 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0103	Jessica Miller Class time/details on ELMs M 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0104	Jessica Miller Class time/details on ELMs M 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

0105	Jessica Miller Class time/details on ELMs W 9:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0106	Jessica Miller Class time/details on ELMs W 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0107	Jessica Miller Class time/details on ELMs W 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0108	Jessica Miller Class time/details on ELMs W 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0201	Kyle Dorsey Class time/details on ELMs Tu 9:30am - 10:20am	Seats (Total: 30) ONLINE ONLINE	Discussion
0202	Kyle Dorsey Class time/details on ELMs Tu 8:30am - 9:20am	Seats (Total: 30) ONLINE ONLINE	Discussion
0203	Kyle Dorsey Class time/details on ELMs Tu 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0204	Kyle Dorsey Class time/details on ELMs Tu 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0205	Kyle Dorsey Class time/details on ELMs Th 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0206	Kyle Dorsey Class time/details on ELMs Th 8:30am - 9:20am	Seats (Total: 30) ONLINE ONLINE	Discussion

0207	Kyle Dorsey Class time/details on ELMs Th 9:30am - 10:20am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0208	Kyle Dorsey Class time/details on ELMs Th 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
FC01	Cassandra Philippon MW 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 40) ONLINE	

CCJS200 **Statistics for Criminology and Criminal Justice**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Prerequisite: CCJS100 or CCJS105. And 1 course with a minimum grade of C- from (STAT100, MATH107, MATH111, MATH120, MATH130, MATH135, MATH140); or must have completed MATH220 with a minimum grade of C-. Restriction: Must be in Criminology and Criminal Justice program; or permission of BSOS-Criminology & Criminal Justice department. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introduction to descriptive and inferential statistics, graphical techniques, and the computer analysis of criminology and criminal justice data. Basic procedures of hypothesis testing, correlation and regression analysis, and the analysis of continuous and binary dependent variables. Emphasis upon the examination of research problems and issues in criminology and criminal justice.

0201	Greg Midgette Class time/details on ELMs Th 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0202	Greg Midgette Class time/details on ELMs Th 12:30pm - 1:20pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0203	Greg Midgette Class time/details on ELMs Th 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

0204	Greg Midgette Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0205	Greg Midgette Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0206	Greg Midgette Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion

CCJS225 **Responses to Violence**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSSP, SCIS

Conflict is unfortunately resolved through violence in a number of settings. It ranges from interpersonal to international in its scope. This course investigates the strengths and weakness of a number of resolutions to reducing violence over the course of history using both state centered and informal control.

0101	Jessica Miller Class time/details on ELMs	Seats (Total: 65) ONLINE
0201	Kyle Dorsey Class time/details on ELMs	Seats (Total: 55) ONLINE

CCJS230 **Criminal Law in Action**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100.

Law as one of the methods of social control. Criminal law: its nature, sources and types; theories and historical developments. Behavioral and legal aspects of criminal acts. Classification and analysis of selected criminal offenses.

0101	Cortney Fisher TuTh 3:30pm - 4:45pm	Seats (Total: 100) ONLINE
0201	Russell Hamill W 4:00pm - 6:30pm	Seats (Total: 100) ONLINE

CCJS234 **Law of Criminal Investigation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100 and CCJS230.

General principles and theories of criminal procedure. Due process. Arrest, search and seizure. Recent developments. Study and evaluation of evidence and proof.

0101	David Salem Class time/details on ELMs	Seats (Total: 100) ONLINE

CCJS300 **Criminological and Criminal Justice Research Methods**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: CCJS100 and CCJS105; and (PSYC200, CCJS200, ECON321, BMGT230, or SOCY201).

Introduction to the formulation of research questions covering crime and justice, research designs, data collection, and interpretation and reporting in criminological and justice-system settings.

0101	Laure Brooks Class time/details on ELMs	Seats (Total: 48) ONLINE
0201	Laure Brooks Class time/details on ELMs	Seats (Total: 48) ONLINE
0301	Alan Lehman Class time/details on ELMs	Seats (Total: 60) ONLINE
0401	Alan Lehman Class time/details on ELMs	Seats (Total: 60) ONLINE
ESG1	Wendy Stickle W 9:30am - 12:00pm *Restricted to CCJS students at Shady Grove.*	Seats (Total: 40) ONLINE

CCJS310 **Criminal Investigations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100 and CCJS230.

An introduction to modern methods used in detection, investigation, and solution of crime. Students will be taught basic and advanced investigative techniques utilized by law enforcement agencies. Analysis of actual cases will be used to demonstrate practical uses of these techniques.

ESG1	Shawn Eastman Th 11:00am - 1:30pm *Restricted to CCJS students at Shady Grove.*	Seats (Total: 30) Location: TBA	
ESG2	David Anderson Th 9:30am - 10:45am Class time/details on ELMs *Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email ccjsusg@umd.edu for permission.*	Seats (Total: 40) ONLINE ONLINE	 Discussion

CCJS320 **Introduction to Criminalistics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100 and CCJS230.

An introduction to modern methods used in the detection, investigation and solution of crimes. Practical analysis of evidence in a crime laboratory, including fingerprints and other impressions, firearms ID and ballistics, hairs and fibers, document examination, and use of polygraph.

Students must pay a $53.00 lab fee.

0101	Thomas Mauriello Class time/details on ELMs M 10:00am - 12:00pm	Seats (Total: 24) ONLINE MMH 2401	 Lab
0201	Thomas Mauriello Class time/details on ELMs M 1:00pm - 3:00pm	Seats (Total: 24) ONLINE MMH 2401	 Lab
0301	Thomas Mauriello Class time/details on ELMs M 4:00pm - 6:00pm	Seats (Total: 24) ONLINE MMH 2401	 Lab

CCJS325 **Slavery in the Twenty First Century: Combating Human Trafficking**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

Credit only granted for: CCJS325 or CCJS498R. Formerly: CCJS498R.

The trafficking of human beings in its historical, legal, economic, political and social contexts. Scope of the global problem, different forms of human trafficking, and regional trends and practices. Roles of government, the international community and individual actors. Strategies to combat trafficking.

0101	Kyle Dorsey Class time/details on ELMs	Seats (Total: 60) ONLINE
0301	Jessica Miller Class time/details on ELMs	Seats (Total: 60) ONLINE
ESG1	Louis Morlier Class time/details on ELMs *Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email ccjsusg@umd.edu for permission.*	Seats (Total: 50) ONLINE

CCJS340 **Policing**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100.

Critical issues relating to policing. Topics include police discretion, role of police, use of force, misconduct, police research, administration, personnel, and etc.

0101	Laure Brooks Class time/details on ELMs	Seats (Total: 100) ONLINE
0201	David Mitchell M 5:00pm - 7:30pm	Seats (Total: 75) ONLINE
ESG1	Nicole Romeiser Tu 11:00am - 1:30pm *Restricted to CCJS students at Shady Grove.*	Seats (Total: 40) ONLINE

CCJS342 **Corrections**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100. Restriction: Must be in a major within the BSOS-Criminology & Criminal Justice department. Credit only granted for: CCJS342 or CCJS452.

Examination of the American correctional system. Identification of historical and contemporary themes, issues, and trends. Evaluation of correctional policies, practices and research.

0101	Rachel Ellis	Seats (Total: 60)	
	Class time/details on ELMs W 3:30pm - 4:45pm	ONLINE ONLINE	 Discussion

CCJS345 **Courts and Sentencing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100. Restriction: Must be in a major within the BSOS-Criminology & Criminal Justice department.

Contemporary issues in the American court system such as prosecution, sentencing and punishment. Theoretical perspectives on courtroom decision-making integrated with empirical research. Courts and sentencing processes, including initial charging, pretrial detention and final sentencing outcomes. Innovations in courts and sentencing.

0201	James Lynch	Seats (Total: 60)	
	Class time/details on ELMs	ONLINE	
0301	Robert Stewart	Seats (Total: 60)	
	Class time/details on ELMs Th 12:30pm - 1:45pm	ONLINE ONLINE	 Discussion
ESG1	Carlotta Woodward	Seats (Total: 40)	
	M 12:30pm - 1:45pm Class time/details on ELMs	ONLINE ONLINE	
	Restricted to CCJS students at Shady Grove.		

CCJS358B **Special Topics in Study Abroad III; Criminology in Scandanavia**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CCJS358E **Special Topics in Study Abroad III; Drugs and Drug Prevention in Central Europe**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CCJS359 **Field Training in Criminology and Corrections**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Supervised field training in public or private social agencies. Group meetings, individual conferences and written program reports.

Prerequisites: CCJS 105 or CRIM 220; and CCJS 350 or CRIM 450; and permission of department. For majors only.

Contact department for information to register for this course.

CCJS360 **Victimology**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS105.

Overview of the history and theory of victimology. Analysis of victimization patterns with special emphasis on types of victims and crimes. The interaction between victims of crime and the criminal justice system with respect to the role of the victim and the services offered to the victim.

0101	Cortney Fisher	Seats (Total: 100)
	TuTh 5:00pm - 6:15pm	ONLINE

CCJS370 **Race, Crime and Criminal Justice**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DVUP

Prerequisite: CCJS100.

Role and treatment of racial/ethnic minorities in the criminal justice system. Course will provide students with historical and theoretical framework for understanding this dynamic.

0101	Maria Velez	Seats (Total: 60)	
	Class time/details on ELMs	ONLINE	
	M 1:00pm - 1:50pm	ONLINE	Discussion

ESG1	Robin Shusko	Seats (Total: 40)	
	Tu 11:00am - 12:15pm Class time/details on ELMs	ONLINE ONLINE	Discussion
	Restricted to CCJS students at Shady Grove.		

CCJS386 **Experiential Learning**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Permission of BSOS-Criminology & Criminal Justice department; and junior standing or higher.

Contact department for information to register for this course.

CCJS388H **Independent Reading Course in Criminology and Criminal Justice**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Designed for the needs of honor students in criminology and criminal justice.

0101	Bianca Bersani	Seats (Total: 20)
	M 2:00pm - 4:30pm	ONLINE

CCJS389H **Independent Research in Criminology and Criminal Justice**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Independent Research for CCJS Departmental Honors students.

0101	Bianca Bersani	Seats (Total: 20)
	Tu 2:00pm - 4:30pm	ONLINE

CCJS398 **Law Enforcement Field Training**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Supervised, structured and focused field training in law enforcement agencies.

Prerequisite: junior standing. For majors only.

Contact department for information to register for this course.

CCJS399 **Independent Study in Criminology and Criminal Justice**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Integrated reading or research under direction and supervision of a faculty member.

Prerequisite: written consent of faculty under whose direction the study is to be performed, and at least twelve hours of CCJS credits.

Contact department for information to register for this course.

CCJS418C **Seminar in Criminology and Criminal Justice; Women and Crime**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prerequisites: CCJS100 and CCJS105.

0101	Rachel Ellis	Seats (Total: 50)	
	Class time/details on ELMs	ONLINE	
	W 2:00pm - 3:15pm	ONLINE	Discussion

CCJS418D **Seminar in Criminology and Criminal Justice; Evolving Legal Issues**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prerequisite: CCJS100 and CCJS230.

0101	David Salem	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

CCJS418M **Seminar in Criminology and Criminal Justice; Cross National Comparisons of Crime and Criminal Justice**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prerequisites: CCJS100, CCJS105, and CCJS300.

0101	James Lynch	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

CCJS418P **Seminar in Criminology and Criminal Justice; Marijuana, Law and Society**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prerequisites: CCJS100 and CCJS105.

0101	Alan Lehman Class time/details on ELMs	Seats (Total: 50) ONLINE

CCJS418T **Seminar in Criminology and Criminal Justice; Controversies and New Directions in Criminal Justice**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prerequisites: CCJS100 and CCJS105.

0101	Brian Johnson Th 4:00pm - 6:30pm	Seats (Total: 50) ONLINE

CCJS450 **Advanced Juvenile Delinquency**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS105 and CCJS300. Credit only granted for: CCJS350 or CCJS450.

Examination of juvenile delinquency in the United States. Nature and extent of juvenile delinquency, historical approaches, sociological and criminological theories and research, social contexts including the institutions of families, schools, and peers, and social responses. Prevention, punishment, and treatment programs, both within and outside of the juvenile justice and criminal justice systems.

0101	Justine Madoo Class time/details on ELMs	Seats (Total: 50) ONLINE
0201	Jessica Miller Class time/details on ELMs	Seats (Total: 52) ONLINE

CCJS451 **Crime and Delinquency Prevention**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS105 and CCJS300.

Methods and programs in prevention of crime and delinquency.

0101	Kyle Dorsey Class time/details on ELMs	Seats (Total: 100) ONLINE
ESG1	Thomas Alexander Class time/details on ELMs *Restricted to CCJS students at Shady Grove.*	Seats (Total: 40) ONLINE

CCJS453 **White Collar and Organized Crime**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS300; and (CCJS350 or CCJS105).

Definition, detection, prosecution, sentencing and impact of white collar and organized crime. Special consideration given to the role of federal law and enforcement practices.

ESG1	Alan Drew W 11:00am - 1:30pm *Restricted to CCJS students at Shady Grove.*	Seats (Total: 40) ONLINE

CCJS454 **Contemporary Criminological Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS300 and CCJS105.

Examination of the main theoretical accounts that explain the underlying causes of criminal behaviors. Explore how individual choices, socialization experiences, biological factors and social structure affect criminal behaviors.

0101	Wade Jacobsen MWF 10:00am - 10:50am	Seats (Total: 50) ONLINE

CCJS498E **Selected Topics in Criminology and Criminal Justice; Social Construction of Homicide**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

The course will take a structural, sociological, and real world approach to exploring the nature of homicide in contemporary society of the United States. This approach will examine all the different ways look at homicide such as from the media, data gathering, theoretical, police investigator, different types, and the role of capital punishment. We will also examine what research has revealed to us regarding the crime of homicide.

ESG1	Thomas Alexander	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	Restricted to CCJS students at Shady Grove.	

CCJS498G **Selected Topics in Criminology and Criminal Justice; Gangs**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

Prerequisites: CCJS100 and CCJS105.

0101	Justine Madoo	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

CCJS498I **Selected Topics in Criminology and Criminal Justice; Digital Forensics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

An introduction to the methods used in the seizure and forensic analysis of computers, cell phones, and other digital evidence. Students will be familiarized with the use of digital evidence in criminal investigations, relevant case law in computer crime and digital evidence, and the challenges faced by law enforcement. Students will be introduced to the computer forensic tools used by today's law enforcement agencies and basic computer / data storage concepts. This course will include some basic practical application of these tools and concepts in a computer lab environment.

ESG1	John Conroy, Michael Yu	Seats (Total: 30)
	W 12:30pm - 3:00pm	ONLINE
	Restricted to CCJS students at Shady Grove.	

CCJS498K **Selected Topics in Criminology and Criminal Justice; Child Abuse Investigations**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

This course provides knowledge about the nature, causes, and societal responses to child abuse. The course is intended to discuss child abuse from the perspective of multiple disciplines, including social science and public policy. The specific topics of physical, psychological, and sexual abuse, internet exploitation, and child pornography will be analyzed in depth.

ESG1	Louis Morlier	Seats (Total: 40)	
	W 7:00pm - 8:30pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Restricted to CCJS students at Shady Grove.		

CCJS498P **Selected Topics in Criminology and Criminal Justice; Truth and Justice in the Disinformation Era**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

The spread of disinformation, deep fakes and other types of misinformation have serious implications for homeland and national security. In this course, we will explore the psychological and social factors that make us susceptible to propaganda, disinformation, fake news and conspiracy theories. We will discuss the power of false narratives in shaping what we think, how we feel and what we do. Armed with this framework, students will explore the role of social media in legitimizing hate groups (e.g., Holocaust denial) and facilitating foreign information operations (e.g., Russian election interference and Iranian Impersonator Operations). Finally, we will examine efforts by Facebook, Twitter and other media outlets to counter the spread of misinformation, and discuss the effectiveness of current strategies (e.g., fact-checking, improving media literacy, examining source credibility). A large component of this class will be on developing expertise at spotting, diagnosing and responding to different types of misinformation.

ESG1	Steve Sin	Seats (Total: 40)	
	M 9:30am - 12:00pm	ONLINE	
	Restricted to CCJS students at Shady Grove.		

CCJS498X **Selected Topics in Criminology and Criminal Justice; Forensic Investigations in the Criminal Justice System**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

In this course we will define and describe the scope of forensics and discuss reasons why and how forensics provides sound scientific evidence. This course explains methodologies and limits of psycho-diagnosis and the contributions of psychopathology to criminal behavior. Students will apply the multidisciplinary approach to forensic science and discuss special areas of abuse including child abuse and neglect, domestic violence, elder abuse and sexual assault. We will also describe and discuss the legal standards and practices in the prosecution of cases involving forensic science application.

ESG1	Heidi Bresee	Seats (Total: 40)
	Th 9:30am - 12:00pm	ONLINE
	Restricted to CCJS students at Shady Grove.	

CCJS600 **Criminal Justice**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in one of the following programs (Criminology and Criminal Justice (Master's); Criminology and Criminal Justice (Doctoral)) ; or permission of BSOS-Criminology & Criminal Justice department. Formerly: CJUS600.

Current concept of criminal justice in relationship to other concepts in the field. Historical perspective. Criminal justice and social control. Operational implications. Systemic aspects. Issues of evaluation.

0101	Brian Johnson	Seats (Total: 20)
	W 4:00pm - 6:45pm	ONLINE

CCJS604 **Policy Analysis Project**

(Perm req)

Credits: 3 Grading Method: Regular

An application of statistical and conceptual tools to criminal justice data in the student's area of concentration, resulting in a paper reporting the conceptualization, analytic methods and results. The topic of the independent study will be chosen through individual consultation with the instructor.

Contact department for information to register for this course.

CCJS620 **Fundamentals of Criminological Research**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: CCJS498D or CCJS620. Formerly: CCJS498D.

Designed to help criminology students understand and apply three important components of statistics: decriptive statistics (including probability theory), fundamentals of statistical inference, and regression analysis. Course assumes familiarity with basic descriptive statistics. The emphasis of the classes on descriptive statistics is the calculation and interpretation of summary statistical measures for describing raw data. Covers the basic rules of probability and different probabilistic processes that could describe criminal activity. The sessions on fundamentals of statistical inferences are designed to provide background for executing and interpreting hypothesis tests and confidence intervals. The latter portion of the course focuses on regession analysis. Uses the statistical software, Stata.

0101	Sarah Tahamont	Seats (Total: 35)
	Tu 4:00pm - 6:45pm	ONLINE

CCJS631 **Ethics in Criminal Justice**

Credits: 3 Grading Method: Regular

Restriction: Must be in one of the following programs: Criminology and Criminal Justice (Master's); Criminology and Criminal Justice (Doctoral); Sociology (Master's); Sociology (Doctoral); or permission from BSOS-Criminology & Criminal Justice department.

Surveys the implicit and explicit ethical principles that form the foundation of the criminal justice system. The course examines a broad range of the ethical dilemmas and introduces students to the decision-making processes designed to negotiate such dilemmas. Students will learn to navigate controversial cases by employing an ethical decision-making process.

PLL1	Lester Andrist	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
	Must be in Criminal Justice Administration program. For permission to enroll, contact oes@umd.edu.	

CCJS632 **Making Sense of Criminal Justice Methods and Statistics**

Credits: 3 Grading Method: Regular

Restriction: Must be in one of the following programs: Criminology and Criminal Justice (Master's); Criminology and Criminal Justice (Doctoral); Sociology (Master's); Sociology (Doctoral); Master of Professional Studies in Public Safety Leadership and Administration (MPLA); Graduate Certificate in Criminal Justice Administration (Z130); or permission from BSOS-Criminology & Criminal Justice department.

Making Sense of Criminal Justice Methods and Statistics: Equips students with the skills to understand research that relies on statistics. Students learn how to interpret and assess the quality of reports that present crime trends, descriptive statistics, correlations, geo-spatial and social media analytics, risk analysis for repeat offenders, hot spots of crime, and experimental research. By the end of the semester, students will learn to critically assess the quality of published research and evaluate its implications for criminal justice policy.

PLL1	Kiminori Nakamura	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
	Must be in Public Safety Leadership and Administration or Criminal Justice Administration program. For permission to enroll, contact oes@umd.edu	

CCJS653 **Seminar in Corrections**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: CCJS651; or students who have taken courses with comparable content may contact the department. Formerly: CRIM653.

Development, operation and future of correctional systems.

0101	Robert Stewart	Seats (Total: 20)
	Th 4:00pm - 6:45pm	ONLINE

CCJS654 **History of Criminological Thought**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CCJS454; or students who have taken courses with comparable content may contact the department. Formerly: CRIM654.

A study of the development of criminological thought from antiquity to the present.

0101	Wade Jacobsen	Seats (Total: 20)
	Tu 4:00pm - 6:45pm	ONLINE

CCJS699 **Special Criminological Problems**

Credits: 1-3 Grading Method: Regular, Audit

Supervised study of a selected problem in the field of criminal justice.

Contact department for information to register for this course.

CCJS710 **Advanced Statistics Methods - Limited Dependent Variables**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed an approved doctoral level statistics course. Formerly: CRIM710.

Application of advanced data analysis strategies to criminological and criminal justice problems, with specific focus on limited dependent variables.

0101	Laura Dugan	Seats (Total: 15)
	Th 4:00pm - 6:45pm	ONLINE

CCJS720 **Criminal Justice System Planning: Policy Analysis for Crime Control**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed 1 course in research methodology; and 1 course in CCJS. Formerly: CJUS720.

System theory and method; examination of planning methods and models based primarily on a systems approach to the operations of the criminal justice system.

0101	Greg Midgette	Seats (Total: 20)
	W 4:00pm - 6:45pm	ONLINE

CCJS799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

CCJS898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CCJS899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Doctoral dissertation research in criminal justice and criminology.

Contact department for information to register for this course.

CHBE Chemical and Biomolecular Engineering Fall 2020

CHBE100 **Exploring ChBE**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: Permission of instructor; and permission of ENGR-Chemical & Biomolecular Engineering department. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department.

Overview of the specializations and career paths available in chemical and biomolecular engineering. Academic planning, policies and resources will be covered including introduction to undergraduate research, study abroad, internship and co-op opportunities as well as chemical engineering student groups. A peer mentoring program will enable students to interact with successful upper-class chemical engineering students and build their chemical engineering peer network.

0101	Ganesh Sriram, Deborah Goldberg	Seats (Total: 35)	
	W 3:00pm - 3:50pm	ONLINE	

CHBE250 **Computer Methods in Chemical Engineering**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHBE101; and must have completed or be concurrently enrolled in MATH241. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE250 or ENCH250. Formerly: ENCH250.

Algorithm development and application of software to the analysis of chemical engineering problems. File management and editing, graphics and numerical methods. Use of spreadsheets, statistics/math software and process simulators for the design of chemical process equipment.

0101	Nam Sun Wang	Seats (Total: 95)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	M 11:00am - 11:50am	ONLINE	Discussion

CHBE301 **Chemical and Biomolecular Engineering Thermodynamics I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHBE101; and must have completed or be concurrently enrolled in CHBE250 and MATH241. Restriction: Must be in Engineering: Chemical program; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: ENCH300 or CHBE301. Formerly: ENCH300.

Principles of thermodynamics and their application to engineering problems. First and second laws of thermodynamics, properties of gases, liquids and solids, phase equilibrium, flow and non-flow systems, energy conversion, production of work from heat, thermodynamic analysis of processes, equilibrium stage operations and the thermodynamics of chemically reacting systems.

0101	Jeffery Klauda	Seats (Total: 95)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	W 11:00am - 11:50am	ONLINE	Discussion

CHBE333 **Chemical Engineering Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Junior standing; and must be in a major within ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE333 or ENCH333. Formerly: ENCH333.

To develop oral communication skills through a series of class presentations of current chemical engineering topics.

0101	Deborah Goldberg	Seats (Total: 15)
	W 12:00pm - 12:50pm	ONLINE
0103	Deborah Goldberg	Seats (Total: 15)
	W 1:00pm - 1:50pm	ONLINE

CHBE369 **Teaching Experiences in Chemical Engineering**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Students will obtain pedagogical experience by assisting with the teaching of undergraduate courses in Chemical and Biomolecular Engineering.

Contact department for information to register for this course.

CHBE410 **Statistics and Design of Experiments**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHBE250, MATH241, and MATH246. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE410 or ENCH476. Formerly: ENCH476.

An introduction to probability, statistics, and design of experiments for chemical engineers.

0101	Deborah Goldberg	Seats (Total: 100)	
	MWF 10:00am - 10:50am	ONLINE	
	F 11:00am - 11:50am	ONLINE	Discussion

CHBE422 **Chemical and Biomolecular Engineering Transport Phenomena I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHBE101, CHBE250, MATH241, and MATH246. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE422 or ENCH422. Formerly: ENCH422.

Principals of fluid dynamics as applied to model development and process design. Mass, momentum and energy conservation. Statics and surface tension. Equation of Continuity and Navier-Stokes Equation with application to laminar flow. Dimensional analysis. Macroscopic balances, Bernoulli Equation and friction factors with application to turbulent flow.

0101	Panagiotis Dimitrakopoulos	Seats (Total: 65)	
	TuTh 3:30pm - 4:45pm	ONLINE	
	F 1:00pm - 1:50pm	ONLINE	Discussion

CHBE437 **Chemical and Biomolecular Engineering Laboratory**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHBE424, CHBE426, and CHBE440. Restriction: Must be in a major within ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE437 or ENCH437. Formerly: ENCH437.

Application of chemical engineering process and unit operation principals in small-scale semi-commercial equipment. Data from experimental observations are used to evaluate performance and efficiency of operations. Emphasis on correct presentation of results inreport form.

0201	Audaldo Ponce, Chen Zhang	Seats (Total: 24)	
	Tu 11:00am - 3:00pm	ONLINE	Lab
	Tu 10:00am - 10:50am	ONLINE	Discussion
0301	Chen Zhang, Audaldo Ponce	Seats (Total: 24)	
	Th 11:00am - 3:00pm	ONLINE	Lab
	Th 10:00am - 10:50am	ONLINE	Discussion

0401	Audaldo Ponce, Chen Zhang	Seats (Total: 24)	
	F 1:00pm - 5:00pm	ONLINE	Lab
	F 10:00am - 10:50am	ONLINE	Discussion

CHBE440 **Chemical Kinetics and Reactor Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHBE301, MATH241, and MATH246. Restriction: Must be in Engineering: Chemical program; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE440 or ENCH440. Formerly: ENCH440.

Fundamentals of chemical reaction kinetics and their application to the design and operation of chemical reactors. Reaction rate theory, homogeneous reactions and catalysis electrochemical reactions. Catalytic reactor design.

0101	Srinivasa Raghavan	Seats (Total: 60)	
	MWF 2:00pm - 2:50pm	ONLINE	
	M 1:00pm - 1:50pm	ONLINE	Discussion

CHBE442 **Chemical and Biomolecular Systems Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHBE424 and CHBE426. Credit only granted for: CHBE442 or ENCH442. Formerly: ENCH442.

Dynamic response applied to process systems. Goals and modes of control, Laplace transformations, analysis and synthesis of simple control systems, closed loop response, dynamic testing.

0101	Kyu Yong Choi	Seats (Total: 100)	
	MWF 12:00pm - 12:50pm	ONLINE	
	W 4:00pm - 4:50pm	ONLINE	Discussion

CHBE444 **Process Engineering Economics and Design I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHBE424, CHBE426, and CHBE440. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE444 or ENCH444. Formerly: ENCH444.

Principles of chemical engineering economics and process design. Equipment sizing and costing. Economic evaluation of projects. Flowsheet synthesis. Introduction to flowsheet simulators and concepts of flowsheet optimization. Synthesis of Heat Exchanger Networks and Distillation Sequences.

0101	Ganesh Sriram TuTh 3:30pm - 4:45pm W 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Ganesh Sriram TuTh 3:30pm - 4:45pm W 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

CHBE468 **Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

Investigation of a research project under the direction of a faculty member. Comprehensive reports are required.

Contact department for information to register for this course.

CHBE469 **Special Projects**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special project under the direction of a faculty member. Comprehensive reports are required.

Contact department for information to register for this course.

CHBE470 **Colloid and Interface Science**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHBE424 and CHBE426. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department.

Introduction to colloidal systems and interfacial science. Topics include preparation, stability and coagulation kinetics of colloidal suspensions. Introduction to DLVO theory, electrokinetic phenomena, colloidal aggregation, interfacial phenomena, double layer theory, surface chemistry. Discussion of interfacial thermodynamics and interfacial forces for solid-liquid interfaces. Applications to nanomaterial synthesis, nanomaterial and polymer self-assembly, protein-protein interactions, and protein aggregation will be discussed.

0101	Taylor Woehl MWF 11:00am - 11:50am	Seats (Total: 30) ONLINE

CHBE472 **Control of Air Pollution Sources**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

Sources and effects of air pollutants, regulatory trends, atmospheric dispersion models, fundamentals of two-phase flow as applied to air pollution and air pollution control systems, design of systems for control of gases and particulate matter.

0101	Akua Asa-Awuku	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

CHBE473 **Electrochemical Energy Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: ENCH468K or CHBE473. Formerly: ENCH468K.

The lecture will start from the basic electrochemical thermodynamics and kinetics, with emphasis on electrochemical techniques, fundamental principle and performance of batteries, and supercapacitors.

0101	Paul Albertus	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	ONLINE

CHBE481 **Transport Phenomena in Small and Biological Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: ENCH468W or CHBE481. Formerly: ENCH468W.

Interdisciplinary course primarily for senior undergraduate and graduate students from engineering or science departments. The course's main goal is to make the students familiar with the fundamental physics and modeling of transport phenomena in small and biological systems, and their current scientific and engineering utilization in microfluidics, nanofluidics and biological systems.

0101	Panagiotis Dimitrakopoulos	Seats (Total: 20)
	MW 5:00pm - 6:15pm	ONLINE

CHBE486 **Heterogeneous Catalysis for Energy Applications**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHBE302, CHBE424, and CHBE440; and permission of instructor. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE486 or ENCH686.

Introduction to heterogeneous catalytic science and technology for energy conversion and hydocarbon processing. Preparation and mechanistic characterization of catalyst systems, kinetics of catalyzed reactions, adsorption and diffusion influences in heterogenious reactions. An overview of heterogeneous catalysis in various energy-related applications, including petroleum refining, chemicals from biomass, valorization of shale gas, and CO2 utilization will be introduced.

0101	Dongxia Liu	Seats (Total: 37)
	MWF 9:00am - 9:50am	ONLINE

CHBE497 **Protein Engineering**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: BIOE120, CHBE302, and CHBE440; and permission of instructor. Credit only granted for: CHBE497, BIOE489R, or ENCH 648P.

This course will cover the fundamentals of protein engineering and its applications in medicine, chemical processes, and energy. Topics will include the structure and function of biological molecules, rational design and directed evolution, construction of protein and peptide libraries, protein screening platforms, methods for characterizing structure and function of biological molecules. Scientific literature will be used to highlight key discoveries and current work in protein engineering.

0101	Amy Karlsson	Seats (Total: 20)
	MW 9:00am - 10:15am	ONLINE

CHEM Chemistry Fall 2020

The College of Computer, Mathematical and Natural Sciences enforces course prerequisites. Students who do not meet the course prerequisites will be administratively dropped from the course. Registration in course sections which begin with "SEF" are restricted to students admitted into the Science in the Evening Program, administer ed through the Office of Extended Studies. For complete information, visit: OES website, email:oes@umd.edu, or call 301-405-7762.*

CHEM131 **Chemistry I - Fundamentals of General Chemistry**

Credits: 3 Grading Method: Regular

General Education: DSNL (if taken with CHEM132), DSNS

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM132. Recommended: For Science majors. Credit only granted for: CHEM103, CHEM131, CHEM135, CHEM153 or CHEM146. Formerly: CHEM103.

An overview of the Periodic Table, inorganic substances, ionic and covalent bonding, bulk properties of materials, chemical equilibrium, and quantitative chemistry. CHEM131 is the first course in a four-semester sequence for students majoring in the sciences, other than Chemistry and Biochemistry majors.

Students without the math pre-requisite will be administratively dropped. For all sections (excluding the Freshmen Connection (FC) and Science in the Evening (PDS1) sections), there will be 3 hour exams which will take place at 7:00-8:15pm on Monday October 5, Monday November 2, and Monday December 7.

1221	Garegin Papoian MWF 10:00am - 10:50am Tu 8:00am - 8:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
1222	Garegin Papoian MWF 10:00am - 10:50am Tu 9:30am - 10:20am	Seats (Total: 40) ONLINE ONLINE	 Discussion
1224	Garegin Papoian MWF 10:00am - 10:50am Tu 11:00am - 11:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
1241	Garegin Papoian MWF 10:00am - 10:50am Th 8:00am - 8:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
1242	Garegin Papoian MWF 10:00am - 10:50am Th 9:30am - 10:20am	Seats (Total: 20) ONLINE ONLINE	 Discussion
1243	Garegin Papoian MWF 10:00am - 10:50am Th 11:00am - 11:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
1325	Alice Mignerey Class time/details on ELMs Tu 12:30pm - 1:20pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
1327	Alice Mignerey Class time/details on ELMs Tu 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

1328	Alice Mignerey Class time/details on ELMs Tu 3:30pm - 4:20pm	Seats (Total: 40) ONLINE ONLINE	Discussion
1345	Alice Mignerey Class time/details on ELMs Th 12:30pm - 1:20pm	Seats (Total: 40) ONLINE ONLINE	Discussion
1347	Alice Mignerey Class time/details on ELMs Th 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	Discussion
1348	Alice Mignerey Class time/details on ELMs Th 3:30pm - 4:20pm	Seats (Total: 40) ONLINE ONLINE	Discussion
1425	Alice Mignerey MWF 8:00am - 8:50am Tu 12:30pm - 1:20pm	Seats (Total: 40) ONLINE ONLINE	Discussion
1426	Alice Mignerey MWF 8:00am - 8:50am Tu 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	Discussion
1427	Alice Mignerey MWF 8:00am - 8:50am Tu 3:30pm - 4:20pm	Seats (Total: 40) ONLINE ONLINE	Discussion
1445	Alice Mignerey MWF 8:00am - 8:50am Th 12:30pm - 1:20pm	Seats (Total: 40) ONLINE ONLINE	Discussion
1446	Alice Mignerey MWF 8:00am - 8:50am Th 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
1447	Alice Mignerey MWF 8:00am - 8:50am Th 3:30pm - 4:20pm	Seats (Total: 40) ONLINE ONLINE	Discussion

1521	Garegin Papoian Class time/details on ELMs Tu 8:00am - 8:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
1522	Garegin Papoian Class time/details on ELMs Tu 9:30am - 10:20am	Seats (Total: 40) ONLINE ONLINE	 Discussion
1523	Garegin Papoian Class time/details on ELMs Tu 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
1541	Garegin Papoian Class time/details on ELMs Th 8:00am - 8:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
1542	Garegin Papoian Class time/details on ELMs Th 9:30am - 10:20am	Seats (Total: 40) ONLINE ONLINE	 Discussion
1543	Garegin Papoian Class time/details on ELMs Th 4:30pm - 5:20pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
FC01	Samuel Lascio TuTh 4:30pm - 5:45pm F 11:00am - 11:50am *Restricted to students in Freshmen Connection.*	Seats (Total: 44) ONLINE ONLINE	 Discussion
FC02	Samuel Lascio TuTh 4:30pm - 5:45pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 44) ONLINE ONLINE	 Discussion
FC03	Samuel Lascio TuTh 4:30pm - 5:45pm F 3:00pm - 3:50pm *Restricted to students in Freshmen Connection.*	Seats (Total: 44) ONLINE ONLINE	 Discussion

PDS1	Amanda Schech M 6:30pm - 9:30pm W 6:30pm - 7:20pm	Seats (Total: 50) ONLINE ONLINE	 Discussion
	Restricted to students in the SIE Program. Click here for more information.		
PDS2	Amanda Schech M 6:30pm - 9:30pm W 6:30pm - 7:20pm	Seats (Total: 50) ONLINE ONLINE	 Discussion
	Restricted to students in the SIE Program. Click here for more information.		

CHEM131S **Chemistry I - Fundamentals of General Chemistry**

Credits: 3 Grading Method: Regular General Education: DSNL (if taken with CHEM132), DSNS

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM132. Recommended: For Science majors. Credit only granted for: CHEM103, CHEM131, CHEM135, CHEM153 or CHEM146. Formerly: CHEM103.

An overview of the Periodic Table, inorganic substances, ionic and covalent bonding, bulk properties of materials, chemical equilibrium, and quantitative chemistry. CHEM131 is the first course in a four-semester sequence for students majoring in the sciences, other than Chemistry and Biochemistry majors.

Restricted to College Park Scholars - Life Sciences. Students without the math pre-requisite will be administratively dropped.

1242	Garegin Papoian MWF 10:00am - 10:50am Th 9:30am - 10:20am	Seats (Total: 20) ONLINE ONLINE	 Discussion
1327	Alice Mignerey Class time/details on ELMs Tu 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
1446	Alice Mignerey MWF 8:00am - 8:50am Th 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
1523	Garegin Papoian Class time/details on ELMs Tu 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

CHEM132 **General Chemistry I Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM131. Credit only granted for: CHEM103, CHEM132, CHEM136, CHEM143, CHEM147 or CHEM177. Formerly: CHEM103.

Introduction to the quantification of chemical substances, including the concept of the mole and chemical stoichiometry. Additional work involves the synthesis of ionic substances and their qualitative characterization. Must be taken concurrently with CHEM131.

Prerequisite: Must have math eligibility of MATH120 or higher. Laboratory sessions will begin after the first lecture. Students must pay a $40.00 laboratory materials fee.

1111	Christiana Guest M 9:00am - 11:50am	Seats (Total: 24) ESJ 2324	Lab
1122	Christiana Guest M 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1316	Lab
1131	Christiana Guest M 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1312	Lab
1211	Christiana Guest Tu 9:30am - 12:20pm	Seats (Total: 24) ESJ 1312	Lab
1221	Christiana Guest Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1312	Lab
1222	Christiana Guest Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1316	Lab
1223	Christiana Guest Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 2324	Lab
1232	Christiana Guest Tu 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1316	Lab
1321	Christiana Guest W 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1312	Lab
1331	Christiana Guest W 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1312	Lab

1333	Christiana Guest W 3:00pm - 5:50pm	Seats (Total: 24) ESJ 2324	Lab
1411	Christiana Guest Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 1312	Lab
1412	Christiana Guest Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 1316	Lab
1422	Christiana Guest Th 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1316	Lab
1432	Christiana Guest Th 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1316	Lab
1531	Christiana Guest F 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1312	Lab
1532	Christiana Guest F 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1316	Lab
FC11	Christiana Guest Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 28) ONLINE	Lab
FC12	Christiana Guest Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 28) ONLINE	Lab
FC13	Christiana Guest F 9:00am - 11:50am *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ESJ 1330	Lab
FC21	Christiana Guest Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 28) ONLINE	Lab
FC22	Christiana Guest Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 28) ONLINE	Lab

FC23	Christiana Guest F 12:00pm - 2:50pm	Seats (Total: 18) ESJ 1330	Lab
	Restricted to students in Freshmen Connection.		
FC33	Christiana Guest F 3:00pm - 5:50pm	Seats (Total: 18) ESJ 1330	Lab
	Restricted to students in Freshmen Connection.		
PDS1	Christiana Guest W 7:30pm - 10:30pm	Seats (Total: 24) ONLINE	Lab
	Restricted to students in the SIE Program. Click here for more information.		
PDS2	Christiana Guest W 7:30pm - 10:30pm	Seats (Total: 24) ONLINE	Lab
	Restricted to students in the SIE Program. Click here for more information.		

CHEM132C **General Chemistry I Laboratory**

Credits: 1 Grading Method: Regular, Pass-Fail

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM131. Credit only granted for: CHEM103, CHEM132, CHEM136, CHEM143, CHEM147 or CHEM177. Formerly: CHEM103.

Introduction to the quantification of chemical substances, including the concept of the mole and chemical stoichiometry. Additional work involves the synthesis of ionic substances and their qualitative characterization. Must be taken concurrently with CHEM131.

Restricted to new freshmen and new transfer students in Biological Science, Chemistry, Biochemistry, or Neuroscience. Prerequisite: Must have math eligibility of MATH120 or higher. Students must pay a $40.00 laboratory materials fee.

1121	Christiana Guest M 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1312	Lab
1123	Christiana Guest M 12:00pm - 2:50pm	Seats (Total: 24) ESJ 2324	Lab
1132	Christiana Guest M 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1316	Lab

1213	Christiana Guest Tu 9:30am - 12:20pm	Seats (Total: 24) ESJ 2324	Lab
1231	Christiana Guest Tu 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1312	Lab
1323	Christiana Guest W 12:00pm - 2:50pm	Seats (Total: 24) ESJ 2324	Lab
1421	Christiana Guest Th 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1312	Lab
1433	Christiana Guest Th 3:30pm - 6:20pm *Restricted to BioFire students.*	Seats (Total: 24) ESJ 2324	Lab
1521	Christiana Guest F 12:00pm - 2:50pm *Restricted to BioFire students.*	Seats (Total: 24) ESJ 1312	Lab

CHEM132S **General Chemistry I Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM131. Credit only granted for: CHEM103, CHEM132, CHEM136, CHEM143, CHEM147 or CHEM177. Formerly: CHEM103.

Introduction to the quantification of chemical substances, including the concept of the mole and chemical stoichiometry. Additional work involves the synthesis of ionic substances and their qualitative characterization. Must be taken concurrently with CHEM131.

Restricted to College Park - Life Sciences. Prerequisite: Must have math eligibility of MATH120 or higher. Laboratory sessions will begin after the first lecture. Students must pay a $40.00 laboratory materials fee.

1212	Christiana Guest Tu 9:30am - 12:20pm	Seats (Total: 24) ESJ 1316	Lab
1322	Christiana Guest W 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1316	Lab

1431	Christiana Guest	Seats (Total: 24)	
	Th 3:30pm - 6:20pm	ESJ 1312	Lab

CHEM132V **General Chemistry I Laboratory**

Credits: 1 Grading Method: Regular, Pass-Fail

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM131. Credit only granted for: CHEM103, CHEM132, CHEM136, CHEM143, CHEM147 or CHEM177. Formerly: CHEM103.

Introduction to the quantification of chemical substances, including the concept of the mole and chemical stoichiometry. Additional work involves the synthesis of ionic substances and their qualitative characterization. Must be taken concurrently with CHEM131.

1000	Christiana Guest	Seats (Total: 410)	
	Class time/details on ELMs	ONLINE	Lab

CHEM134 **Chemical Principles for Engineering**

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in CHEM131; or minimum grade of C- in CHEM146. Credit only granted for: CHEM 134 or CHEM 135.

Basic chemistry for engineering students. Introduction to organic structures and polymers, gas laws, liquids, solids, phase changes, chemical kinetics and electrochemistry.

0101	Elizabeth Griffith	Seats (Total: 160)	
	Tu 8:00am - 8:50am	ONLINE	

CHEM135 **General Chemistry for Engineers**

Credits: 3 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Credit only granted for: CHEM103, CHEM113, CHEM131, CHEM135, or CHEM146.

The nature and composition of matter, solutions, chemical reactions, equilibria, and electrochemistry, with applications to various fields of engineering.

For all sections of CHEM 135, there will be three hour exams which will take place at 7-8:15 p.m. on Wednesdays, dates to be announced.

3125	Lenea Stocker	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm M 12:00pm - 12:50pm	ONLINE ONLINE	Discussion
3126	Lenea Stocker	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm M 1:00pm - 1:50pm	ONLINE ONLINE	Discussion
3127	Lenea Stocker	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm M 2:00pm - 2:50pm	ONLINE ONLINE	Discussion
3145	Lenea Stocker	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm W 12:00pm - 12:50pm	ONLINE ONLINE	Discussion
3147	Lenea Stocker	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm W 1:00pm - 1:50pm	ONLINE ONLINE	Discussion
3148	Lenea Stocker	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm W 2:00pm - 2:50pm	ONLINE ONLINE	Discussion
3225	Lenea Stocker	Seats (Total: 40)	
	MWF 2:00pm - 2:50pm Tu 8:00am - 8:50am	ONLINE ONLINE	Discussion
3226	Lenea Stocker	Seats (Total: 40)	
	MWF 2:00pm - 2:50pm Tu 9:30am - 10:20am	ONLINE ONLINE	Discussion
3227	Lenea Stocker	Seats (Total: 40)	
	MWF 2:00pm - 2:50pm Tu 11:00am - 11:50am	ONLINE ONLINE	Discussion
3245	Lenea Stocker	Seats (Total: 40)	
	MWF 2:00pm - 2:50pm Th 8:00am - 8:50am	ONLINE ONLINE	Discussion

3247	Lenea Stocker MWF 2:00pm - 2:50pm Th 9:30am - 10:20am	Seats (Total: 40) ONLINE ONLINE	 Discussion
3248	Lenea Stocker MWF 2:00pm - 2:50pm Th 11:00am - 11:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
3425	Lenea Stocker TuTh 12:30pm - 1:45pm M 12:00pm - 12:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
3426	Lenea Stocker TuTh 12:30pm - 1:45pm M 1:00pm - 1:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
3427	Lenea Stocker TuTh 12:30pm - 1:45pm M 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
3445	Lenea Stocker TuTh 12:30pm - 1:45pm W 12:00pm - 12:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
3446	Lenea Stocker TuTh 12:30pm - 1:45pm W 1:00pm - 1:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
3447	Lenea Stocker TuTh 12:30pm - 1:45pm W 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
FC01	Lenea Stocker Class time/details on ELMs F 11:00am - 11:50am *Restricted to students in Freshmen Connection.*	Seats (Total: 50) ONLINE ONLINE	 Discussion
FC02	Lenea Stocker Class time/details on ELMs F 12:00pm - 12:50pm *Restricted to students in Freshmen Connection.*	Seats (Total: 45) ONLINE ONLINE	 Discussion

FC03	Lenea Stocker Class time/details on ELMs F 1:00pm - 1:50pm *Restricted to students in Freshmen Connection.*	Seats (Total: 40) ONLINE ONLINE	 Discussion

CHEM136 **General Chemistry Laboratory for Engineers**

Credits: 1 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in CHEM135 and must have math eligibility of MATH120 or higher. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

A laboratory course for engineering majors intending to take CHEM231 and CHEM232.

Prerequisite: Must have math eligibility of MATH120 or higher. Students must pay a $40.00 laboratory materials fee.

1125	Christiana Guest M 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1330	 Lab
1135	Christiana Guest Tu 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1330	 Lab
1215	Christiana Guest Tu 9:30am - 12:20pm	Seats (Total: 24) ESJ 1330	 Lab
1225	Christiana Guest Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1330	 Lab

CHEM136V **General Chemistry Laboratory for Engineers**

Credits: 1 Grading Method: Regular, Pass-Fail

Prerequisite: Must have completed or be concurrently enrolled in CHEM135 and must have math eligibility of MATH120 or higher. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

A laboratory course for engineering majors intending to take CHEM231 and CHEM232.

1000	Christiana Guest Class time/details on ELMs	Seats (Total: 60) ONLINE	 Lab

CHEM146 **Principles of General Chemistry**

Credits: 3 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH140 or higher. Corequisite: CHEM177. Restriction: Must be in one of the following programs (Chemistry; Biochemistry). Credit only granted for: CHEM103, CHEM131, CHEM135, CHEM143, or CHEM146. Formerly: CHEM143.

An overview of the Periodic Table, inorganic substances, ionic and covalent bonding, bulk properties of materials, chemical equilibrium, and quantitative chemistry. CHEM146 is the first course in a four-semester sequence for Chemistry and Biochemistry majors.

0032	Andrei Vedernikov MWF 9:00am - 9:50am Tu 9:30am - 10:20am	Seats (Total: 23) BRB 1101 CHM 1402	 Discussion
0033	Andrei Vedernikov MWF 9:00am - 9:50am Th 9:30am - 10:20am	Seats (Total: 23) BRB 1101 CHM 1402	 Discussion

CHEM177 **Introduction to Laboratory Practices and Research in the Chemical Sciences**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM146, CHEM131, or CHEM135. Restriction: Must be in a major within CMNS-Chemistry & Biochemistry department; or permission of CMNS-Chemistry & Biochemistry department. Credit only granted for: CHEM132, CHEM136, CHEM147, or CHEM177.

First semester laboratory course required for CHEM and BCHM majors. Introduction to laboratory techniques, including safety practices, scientific ethics, and presentation of current research topics.

Prerequisite: Must have math eligibility of MATH120 or higher. Students must pay a $40.00 laboratory materials fee.

1131	Elizabeth Griffith F 3:00pm - 3:50pm Class time/details on ELMs M 3:00pm - 5:50pm	Seats (Total: 9) ONLINE ONLINE ESJ 0312	 Lab
1211	Elizabeth Griffith F 3:00pm - 3:50pm Class time/details on ELMs Tu 9:30am - 12:20pm	Seats (Total: 9) ONLINE ONLINE ESJ 0312	 Lab

1231	Elizabeth Griffith F 3:00pm - 3:50pm Class time/details on ELMs Tu 3:30pm - 6:20pm	Seats (Total: 9) ONLINE ONLINE ESJ 0312	 Lab
1331	Elizabeth Griffith F 3:00pm - 3:50pm Class time/details on ELMs W 3:00pm - 5:50pm	Seats (Total: 9) ONLINE ONLINE ESJ 0312	 Lab
1411	Elizabeth Griffith F 3:00pm - 3:50pm Class time/details on ELMs Th 9:30am - 12:20pm	Seats (Total: 9) ONLINE ONLINE ESJ 0312	 Lab
1431	Elizabeth Griffith F 3:00pm - 3:50pm Class time/details on ELMs Th 3:30pm - 6:20pm	Seats (Total: 9) ONLINE ONLINE ESJ 0312	 Lab
1521	Elizabeth Griffith F 3:00pm - 3:50pm Class time/details on ELMs F 12:00pm - 2:50pm	Seats (Total: 9) ONLINE ONLINE ESJ 0312	 Lab

CHEM231 **Organic Chemistry I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, CHEM135, or CHEM146; and (CHEM132, CHEM136, CHEM147, or CHEM177); and a grade of C- or better in the prerequisites is required of College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM232. Credit only granted for: CHEM104, CHEM231, CHEM233 or CHEM237. Formerly: CHEM233.

The chemistry of carbon: aliphatic compounds, aromatic compounds, stereochemistry, arenes, halides, alcohols, esters and spectroscopy.

For all sections of CHEM 231, there will be three hour exams which will take place at 7-8:15 p.m. on Monday, Oct. 5; Monday, Nov. 2; and on Monday, Dec. 7.

5125	Bonnie Dixon MWF 9:00am - 9:50am Tu 12:30pm - 1:20pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5127	Bonnie Dixon MWF 9:00am - 9:50am Tu 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5128	Bonnie Dixon MWF 9:00am - 9:50am Tu 3:30pm - 4:20pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5145	Bonnie Dixon MWF 9:00am - 9:50am Th 12:30pm - 1:20pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5147	Bonnie Dixon MWF 9:00am - 9:50am Th 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5148	Bonnie Dixon MWF 9:00am - 9:50am Th 3:30pm - 4:20pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5215	Bonnie Dixon MWF 12:00pm - 12:50pm Tu 12:30pm - 1:20pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5216	Bonnie Dixon MWF 12:00pm - 12:50pm Tu 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5217	Bonnie Dixon MWF 12:00pm - 12:50pm Tu 3:30pm - 4:20pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5235	Bonnie Dixon MWF 12:00pm - 12:50pm Th 12:30pm - 1:20pm	Seats (Total: 31) ONLINE ONLINE	 Discussion

5236	Bonnie Dixon MWF 12:00pm - 12:50pm Th 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5237	Bonnie Dixon MWF 12:00pm - 12:50pm Th 3:30pm - 4:20pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5315	Bonnie Dixon TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5316	Bonnie Dixon TuTh 2:00pm - 3:15pm M 1:00pm - 1:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5317	Bonnie Dixon TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5335	Bonnie Dixon TuTh 2:00pm - 3:15pm W 12:00pm - 12:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5336	Bonnie Dixon TuTh 2:00pm - 3:15pm W 1:00pm - 1:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5337	Bonnie Dixon TuTh 2:00pm - 3:15pm W 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
5421	Bonnie Dixon MWF 2:00pm - 2:50pm Tu 8:00am - 8:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
5422	Bonnie Dixon MWF 2:00pm - 2:50pm Tu 9:30am - 10:20am	Seats (Total: 31) ONLINE ONLINE	 Discussion

5423	Bonnie Dixon	Seats (Total: 31)	
	MWF 2:00pm - 2:50pm Tu 11:00am - 11:50am	ONLINE ONLINE	 Discussion
5441	Bonnie Dixon	Seats (Total: 31)	
	MWF 2:00pm - 2:50pm Th 8:00am - 8:50am	ONLINE ONLINE	 Discussion
5442	Bonnie Dixon	Seats (Total: 31)	
	MWF 2:00pm - 2:50pm Th 9:30am - 10:20am	ONLINE ONLINE	 Discussion
5443	Bonnie Dixon	Seats (Total: 31)	
	MWF 2:00pm - 2:50pm Th 4:30pm - 5:45pm	ONLINE ONLINE	 Discussion
PDS1	Monique Koppel	Seats (Total: 40)	
	M 6:30pm - 9:30pm W 6:30pm - 7:20pm	ONLINE ONLINE	 Discussion
	Restricted to students in the SIE Program. Click here for more information.		
PDS2	Monique Koppel	Seats (Total: 40)	
	M 6:30pm - 9:30pm W 6:30pm - 7:20pm	ONLINE ONLINE	 Discussion
	Restricted to students in the SIE Program. Click here for more information.		

CHEM232 **Organic Chemistry Laboratory I**

Credits: 1 Grading Method: Regular

Prerequisite: CHEM131 and CHEM132; or (CHEM135 and CHEM136); or (CHEM146 and CHEM147). And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM231. Credit only granted for: CHEM104, CHEM231, CHEM233 or CHEM237. Formerly: CHEM233.

Provides experience in developing some basic laboratory techniques, recrystallization, distillation, extraction, chromatography.

Laboratory sessions will begin after the first lecture of CHEM 231. Students must pay a $40.00 laboratory materials fee.

5121	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab

5122	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5123	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5131	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5132	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5141	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5142	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5221	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5222	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5223	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5231	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5232	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5233	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5241	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
5242	Monique Koppel	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab

5321	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5322	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5323	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5331	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5333	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5341	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5421	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5422	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5423	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5431	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5432	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5433	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5441	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5442	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab

5443	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5521	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5522	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5531	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
5532	Monique Koppel Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
PDS1	Monique Koppel W 7:30pm - 10:30pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 20) ONLINE	Lab
PDS2	Monique Koppel W 7:30pm - 10:30pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 20) ONLINE	Lab

CHEM241 **Organic Chemistry II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM231 and CHEM232; or CHEM237. And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Credit only granted for: CHEM241, CHEM243 or CHEM247. Formerly: CHEM243.

A continuation of CHEM231 with emphasis on molecular structure; substitution reactions; carbonium ions; aromaticity; synthetic processes; macromolecules.

For all sections of CHEM 241, there will be three hour exams which will take place at 7-8:15 pm on Tuesday, Sept. 29; Monday, Oct. 26; and on Monday, Nov. 23.

6115	Michael Montague-Smith, Lai-Xi Wang TuTh 8:00am - 9:15am M 12:00pm - 12:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion

6116	Lai-Xi Wang, Michael Montague-Smith TuTh 8:00am - 9:15am M 1:00pm - 1:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6117	Lai-Xi Wang, Michael Montague-Smith TuTh 8:00am - 9:15am M 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6135	Lai-Xi Wang, Michael Montague-Smith TuTh 8:00am - 9:15am W 12:00pm - 12:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6136	Lai-Xi Wang, Michael Montague-Smith TuTh 8:00am - 9:15am W 1:00pm - 1:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6137	Michael Montague-Smith, Lai-Xi Wang TuTh 8:00am - 9:15am W 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6212	Michael Montague-Smith, Lai-Xi Wang TuTh 9:30am - 10:45am M 9:00am - 9:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
6213	Lai-Xi Wang, Michael Montague-Smith TuTh 9:30am - 10:45am M 10:00am - 10:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
6214	Michael Montague-Smith, Lai-Xi Wang TuTh 9:30am - 10:45am M 11:00am - 11:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
6232	Lai-Xi Wang, Michael Montague-Smith TuTh 9:30am - 10:45am W 9:00am - 9:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
6233	Lai-Xi Wang, Michael Montague-Smith TuTh 9:30am - 10:45am W 10:00am - 10:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion

6234	Lai-Xi Wang, Michael Montague-Smith TuTh 9:30am - 10:45am W 11:00am - 11:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
6415	Michael Montague-Smith, Lai-Xi Wang TuTh 12:30pm - 1:45pm M 12:00pm - 12:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6416	Lai-Xi Wang, Michael Montague-Smith TuTh 12:30pm - 1:45pm M 1:00pm - 1:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6417	Michael Montague-Smith, Lai-Xi Wang TuTh 12:30pm - 1:45pm M 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6435	Lai-Xi Wang, Michael Montague-Smith TuTh 12:30pm - 1:45pm W 12:00pm - 12:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6436	Lai-Xi Wang, Michael Montague-Smith TuTh 12:30pm - 1:45pm W 1:00pm - 1:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
6437	Lai-Xi Wang, Michael Montague-Smith TuTh 12:30pm - 1:45pm W 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
PDS1	Howard Fribush M 6:30pm - 9:30pm W 6:30pm - 7:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 45) ONLINE ONLINE	 Discussion
PDS2	Howard Fribush M 6:30pm - 9:30pm W 6:30pm - 7:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 45) ONLINE ONLINE	 Discussion

CHEM242 Organic Chemistry Laboratory II

Credits: 1 Grading Method: Regular

Prerequisite: CHEM231 and CHEM232; or CHEM237. And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM241. Credit only granted for: CHEM243 or CHEM247. Formerly: CHEM243.

Synthetic organic chemistry through functional group manipulation, introduction to instrumentation essential to analysis and structure elucidation.

Students must pay a $40.00 laboratory materials fee.

6121	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6122	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6123	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6131	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6132	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6141	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6142	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6221	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6222	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6231	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6232	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab

6241	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6242	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6321	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6322	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6323	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6331	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6332	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6333	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6343	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6421	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6422	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6423	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6431	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
6432	Lee Friedman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab

6433	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6441	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6442	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6443	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6521	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6522	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6523	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6531	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6532	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
6533	Lee Friedman Class time/details on ELMs	Seats (Total: 20) ONLINE	Lab
PDS1	Lee Friedman W 7:30pm - 10:30pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 20) ONLINE	Lab
PDS2	Lee Friedman W 7:30pm - 10:30pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 20) ONLINE	Lab

CHEM247 Principles of Organic Chemistry II

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM237; or permission of CMNS-Chemistry & Biochemistry department. Restriction: Must be in one of the following programs (Chemistry; Biochemistry) ; or must be an honors student. Credit only granted for: CHEM243 or CHEM247.

A continuation of CHEM237 with emphasis on molecular structure, substitution reactions; carbonium ions; aromaticity; synthetic processes; macromolecules.

Students must pay a $40.00 laboratory materials fee.

6113	Jeffery Davis	Seats (Total: 9)	
	MWF 10:00am - 10:50am	ONLINE	
	M 3:00pm - 5:50pm	CHM 1342	Lab
	Tu 8:00am - 8:50am	ONLINE	Discussion
6123	Jeffery Davis	Seats (Total: 9)	
	MWF 10:00am - 10:50am	ONLINE	
	M 6:00pm - 8:50pm	CHM 1342	Lab
	Tu 8:00am - 8:50am	ONLINE	Discussion
6224	Jeffery Davis	Seats (Total: 9)	
	MWF 10:00am - 10:50am	ONLINE	
	Tu 3:30pm - 6:20pm	CHM 1342	Lab
	Tu 9:30am - 10:20am	ONLINE	Discussion

CHEM271 General Chemistry and Energetics

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM241 and CHEM242; or CHEM247. And a grade of C- or better in the prerequisites for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM272. Credit only granted for: CHEM113, CHEM153, CHEM271 or CHEM276. Formerly: CHEM113.

An introduction to the physical aspects of chemistry; chemical kinetics, thermodynamics and electrochemistry in the context of current chemistry research.

For all sections of CHEM 271, there will be three hour exams which will take place at 7-8:15 p.m. on Wednesdays, dates to be announced.

2121	Efrain Rodriguez, Christopher Jarzynski	Seats (Total: 20)	
	MW 3:00pm - 3:50pm	ONLINE	
	Tu 12:30pm - 1:20pm	ONLINE	Discussion

2122	Efrain Rodriguez, Christopher Jarzynski MW 3:00pm - 3:50pm Tu 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
2123	Christopher Jarzynski, Efrain Rodriguez MW 3:00pm - 3:50pm Tu 3:30pm - 4:20pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
2141	Christopher Jarzynski, Efrain Rodriguez MW 3:00pm - 3:50pm Th 12:30pm - 1:20pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
2142	Christopher Jarzynski, Efrain Rodriguez MW 3:00pm - 3:50pm Th 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
2143	Christopher Jarzynski, Efrain Rodriguez MW 3:00pm - 3:50pm Th 3:30pm - 4:20pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
2222	Efrain Rodriguez, Christopher Jarzynski MW 11:00am - 11:50am Tu 8:00am - 8:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
2225	Efrain Rodriguez, Christopher Jarzynski MW 11:00am - 11:50am Tu 9:30am - 10:20am	Seats (Total: 20) ONLINE ONLINE	 Discussion
2227	Efrain Rodriguez, Christopher Jarzynski MW 11:00am - 11:50am Tu 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
2242	Christopher Jarzynski, Efrain Rodriguez MW 11:00am - 11:50am Th 8:00am - 8:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
2245	Christopher Jarzynski, Efrain Rodriguez MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 20) ONLINE ONLINE	 Discussion

2247	Efrain Rodriguez, Christopher Jarzynski MW 11:00am - 11:50am Th 4:30pm - 5:20pm	Seats (Total: 20) ONLINE ONLINE	Discussion
2326	Christopher Jarzynski, Efrain Rodriguez MW 3:00pm - 3:50pm Tu 12:30pm - 1:20pm	Seats (Total: 20) ONLINE ONLINE	Discussion
2327	Christopher Jarzynski, Efrain Rodriguez MW 3:00pm - 3:50pm Tu 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
2328	Christopher Jarzynski, Efrain Rodriguez MW 3:00pm - 3:50pm Tu 3:30pm - 4:20pm	Seats (Total: 20) ONLINE ONLINE	Discussion
2346	Christopher Jarzynski, Efrain Rodriguez MW 3:00pm - 3:50pm Th 12:30pm - 1:20pm	Seats (Total: 20) ONLINE ONLINE	Discussion
2347	Christopher Jarzynski, Efrain Rodriguez MW 3:00pm - 3:50pm Th 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
2348	Efrain Rodriguez, Christopher Jarzynski MW 3:00pm - 3:50pm Th 3:30pm - 4:20pm	Seats (Total: 20) ONLINE ONLINE	Discussion
PDS1	Natalia White M 6:00pm - 7:50pm W 6:30pm - 7:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 20) ONLINE ONLINE	Discussion

CHEM272 **General Bioanalytical Chemistry Laboratory**

Credits: 2 Grading Method: Regular, Pass-Fail

Prerequisite: CHEM241 and CHEM242; or CHEM247. And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM271. Credit only granted for: CHEM227, CHEM272 or CHEM277.

An introduction to analytical chemistry with an emphasis on bio-analytical instrumentation and techniques.

For all sections of CHEM 272, there will be a mid term exam which will take place at 7:30-8:30 pm on Monday, October 19. Students must pay a $40.00 laboratory materials fee.

8122	Amanda Schech F 11:00am - 11:50am M 12:00pm - 2:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
8132	Amanda Schech F 11:00am - 11:50am M 3:00pm - 5:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
8211	Amanda Schech F 11:00am - 11:50am Tu 9:30am - 12:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
8222	Amanda Schech F 11:00am - 11:50am Tu 12:30pm - 3:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
8231	Amanda Schech F 11:00am - 11:50am Tu 3:30pm - 6:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
8321	Amanda Schech F 11:00am - 11:50am W 12:00pm - 2:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
8331	Amanda Schech F 11:00am - 11:50am W 3:00pm - 5:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
8421	Amanda Schech F 11:00am - 11:50am Th 12:30pm - 3:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
8431	Amanda Schech F 11:00am - 11:50am Th 3:30pm - 6:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab

9121	Amanda Schech F 3:00pm - 3:50pm M 12:00pm - 2:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
9131	Amanda Schech F 3:00pm - 3:50pm M 3:00pm - 5:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
9221	Amanda Schech F 3:00pm - 3:50pm Tu 12:30pm - 3:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
9232	Amanda Schech F 3:00pm - 3:50pm Tu 3:30pm - 6:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
9322	Amanda Schech F 3:00pm - 3:50pm W 12:00pm - 2:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
9332	Amanda Schech F 3:00pm - 3:50pm W 3:00pm - 5:50pm	Seats (Total: 26) ONLINE ONLINE	 Lab
9422	Amanda Schech F 3:00pm - 3:50pm Th 12:30pm - 3:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
9432	Amanda Schech F 3:00pm - 3:50pm Th 3:30pm - 6:20pm	Seats (Total: 26) ONLINE ONLINE	 Lab
PDS1	Amanda Schech M 8:00pm - 8:50pm W 7:30pm - 10:30pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 26) ONLINE ONLINE	 Lab

CHEM277 **Fundamentals of Analytical and Bioanalytical Chemistry Laboratory**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CHEM241 and CHEM242; or minimum grade of C- in CHEM247. Corequisite: CHEM276. Restriction: Must be in one of the following programs (Chemistry; Biochemistry). Credit only granted for: CHEM153, CHEM227, CHEM272 or CHEM277.

Quantitative analysis, inorganic analytical chemistry, and an introduction to bio-analytical instrumentation and techniques.

Students must pay a $40.00 lab materials fee.

8111	Neil Blough F 11:00am - 11:50am MW 12:00pm - 2:50pm	Seats (Total: 12) IRB 1116 ESJ 0312	 Lab
8211	Neil Blough F 11:00am - 11:50am TuTh 12:30pm - 3:20pm	Seats (Total: 12) IRB 1116 ESJ 0312	 Lab

CHEM398 **Special Projects**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Honors projects for undergraduate students.

Limited to chemistry honors students. Consult with Dr. Montague-Smith.

Contact department for information to register for this course.

CHEM399A **Introduction to Chemical Research**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Contact department for information to register for this course.

CHEM399B **Introduction to Chemical Research**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Contact department for information to register for this course.

CHEM399C **Introduction to Chemical Research**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Contact department for information to register for this course.

CHEM399X **Introduction to Chemical Research; Chemistry Instruction**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

0101	Michael Montague-Smith Contact instructor or department for details.	Seats (Total: 8)
0102	Lee Friedman Contact instructor or department for details.	Seats (Total: 30)

CHEM403 **Radiochemistry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed one year of college chemistry and one year of college physics.

Radioactive decay; introduction to properties of atomic nuclei; nuclear processes in cosmology; chemical, biomedical and environmental applications of radioactivity; nuclear processes as chemical tools; interaction of radiation with matter.

0101	William Walters MWF 12:00pm - 12:50pm	Seats (Total: 40) ONLINE

CHEM425 **Instrumental Methods of Analysis**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM272 and CHEM271; or (CHEM276 and CHEM277).

Modern instrumentation in analytical chemistry. Electronics, spectroscopy, chromatography and electrochemistry.

Students must pay a $40.00 laboratory materials fee.

0101	Peter Nemes MW 10:00am - 10:50am Class time/details on ELMs MW 12:00pm - 2:50pm	Seats (Total: 12) ONLINE ONLINE CHM 3228	 Lab

0102	Peter Nemes MW 10:00am - 10:50am Class time/details on ELMs TuTh 12:30pm - 3:20pm	Seats (Total: 12) ONLINE ONLINE CHM 3228	 Lab
0104	Peter Nemes MW 10:00am - 10:50am Class time/details on ELMs TuTh 9:30am - 12:20pm	Seats (Total: 12) ONLINE ONLINE CHM 3228	 Lab
0105	Peter Nemes MW 10:00am - 10:50am Class time/details on ELMs MW 6:00pm - 8:50pm	Seats (Total: 12) ONLINE ONLINE CHM 3228	 Lab
0109	Peter Nemes MW 10:00am - 10:50am Class time/details on ELMs TuTh 6:30pm - 9:20pm	Seats (Total: 12) ONLINE ONLINE CHM 3228	 Lab

CHEM433 **Atmospheric Chemistry and Climate**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, CHEM135, or CHEM146. And MATH241; or permission of CMNS-Atmospheric & Oceanic Science department; or permission of CMNS-Chemistry & Biochemistry department. Cross-listed with AOSC433. Credit only granted for: AOSC433, AOSC633, CHEM433, or CHEM633. Formerly: CHEM434.

The effects of human activity on atmospheric composition, focused on global warming, the carbon cycle, air pollution, and the ozone layer. Fundamentals of atmosphereic chemistry (spectroscopy, kinetics, isotopic analysis, and biogeochemical cycles) are related to the modern understanding of climate change, air quality, and ozone depletion, based on resources such as satellite missions, field campaigns, and scientific assessments published by international agencies. We also examine how society's energy needs could be met, in the future, in a manner with less impact on atmospheric composition than the present heavy reliance on combusion of fossil fuels.

0101	Ross Salawitch TuTh 2:00pm - 3:15pm Class time/details on ELMs *Alternating face-to-face/ online class meeting. Please see instructor for details.*	Seats (Total: 17) ONLINE ONLINE	

CHEM441 **Advanced Organic Chemistry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in CHEM481; and 1 course with a minimum grade of C- from (CHEM241, CHEM247). Jointly offered with CHEM641.

An advanced study of the compounds of carbon, with special emphasis on molecular orbital theory and organic reaction mechanisms.

0101	Lyle Isaacs	Seats (Total: 25)
	MW 4:00pm - 5:15pm	ONLINE

CHEM460 **Structure Determination Using Spectroscopic Methods**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed CHEM243; or CHEM247; or (CHEM241 and CHEM242). Formerly: CHEM660.

The use of infrared, ultraviolet-visible, proton and carbon-13 nuclear magnetic resonance and mass spectroscopy for structure determination in organic chemistry.

0101	Daniel Falvey	Seats (Total: 40)
	MWF 10:00am - 10:50am	ONLINE

CHEM481 **Physical Chemistry I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM135; or minimum grade of C- in CHEM271 and CHEM272; or minimum grade of C- in CHEM276 and CHEM277. And minimum grade of C- in MATH141. And minimum grade of C- in PHYS260 and PHYS261; or minimum grade of C- in PHYS141.

Thermodynamics and kinetics of chemical and molecular systems. Topics may include internal energy, heat, work, enthalpy, entropy, free energy, and spontaneity as well as reaction order, differential rate laws, integrated rate laws, and rate laws for multi-step processes.

0101	Pratyush Tiwary	Seats (Total: 116)
	MWF 9:00am - 9:50am	ONLINE

CHEM482 **Physical Chemistry II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM481.

Quantum mechanical nature of atoms and molecules. Topics may include model systems for electronic, vibrational, rotational and translational energies as well as connections to molecular spectroscopy and thermal distributions.

0101	Amy Mullin MWF 9:00am - 9:50am	Seats (Total: 42) ONLINE

CHEM483 **Physical Chemistry Laboratory I**

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in CHEM481.

An introduction to the principles and application of quantitative techniques in physical chemical measurements. Experiments will be coordinated with topics in CHEM481.

Students must pay a $40.00 lab materials fee. In-person lab times to be arranged with instructor.

0114	Amanda Souna Th 11:00am - 11:50am Contact instructor or department for details.	Seats (Total: 18) ONLINE
0124	Amanda Souna Th 11:00am - 11:50am Contact instructor or department for details.	Seats (Total: 18) ONLINE
0144	Amanda Souna Th 11:00am - 11:50am Contact instructor or department for details.	Seats (Total: 18) ONLINE

CHEM484 **Physical Chemistry Laboratory II**

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM481 and CHEM483; and must have completed or be concurrently enrolled in CHEM482.

A continuation of CHEM 483. Advanced quantitative techniques necessary in physical chemical measurements. Experiments will be coordinated with topics in CHEM 482.

Students must pay a $40.00 laboratory materials fee. In-person lab times to be arranged with instructor.

0124	Nikolaos Liaros Th 3:30pm - 4:20pm Contact instructor or department for details.	Seats (Total: 12) CHM 1402
0134	Nikolaos Liaros Th 3:30pm - 4:20pm Contact instructor or department for details.	Seats (Total: 12) CHM 1402

CHEM601 **Structure and Bonding of Molecules and Materials**

Credits: 3 Grading Method: Regular, Audit

Development of the tools necessary to use the knowledge of structure and bonding of molecules and solids in the practice of synthetic inorganic and materials chemistry. Several bonding models are covered, from the simple valence bond and ligand field models to a quantitative group theoretical treatment of molecular orbital theory and band structure descriptions of solids. Concepts of electron counting and oxidation state and ligand characteristics are revisited in terms of the more sophisticated bonding models. Finally, these models are used to analyze the reactivity, magnetic and spectroscopic properties of inorganic coordination compounds. Prior advanced inorganic and/or advanced quantum chemistry courses are not prerequisites.

0101	Lawrence Sita Class time/details on ELMs	Seats (Total: 21) ONLINE

CHEM608K **Selected Topics in Inorganic Chemistry; Chemistry Teaching and Learning in Higher Education**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Topics of special interest and current importance.

Cross-listed with BIOL608K, CBMG699K, and ENTM699K. Credit will be grant edfor only one of the following: BIOL608K, CBMG699K, CHEM608K, or ENTM699K.

0101	Gili Ad-Marbach Class time/details on ELMs	Seats (Total: 12) ONLINE

CHEM611 **Professional Skills for New Graduate Students**

Credits: 1 Grading Method: Regular, Audit

Restriction: Must be in one of the following programs (Chemistry (Master's); Biochemistry (Master's); Biochemistry (Doctoral); Chemistry (Doctoral)) ; and must be a new graduate student.

Covers a wide range of topics in professional development for new graduate students.

0101	Efrain Rodriguez F 2:00pm - 3:15pm	Seats (Total: 20) CHM 1402
0102	Efrain Rodriguez F 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

CHEM624 **Electrical Methods of Quantitative Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CHEM482; or students who have taken courses with comparable content may contact the department.

The use of conductivity, potentiometry, polarography, voltammetry, amperometry, coulometry, and chronopotentiometry in quantitative analysis.

0101	Sangbok Lee TuTh 8:00am - 9:15am	Seats (Total: 25) EGR 1202

CHEM633 **Atmospheric Chemistry and Climate**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: CHEM131, CHEM135, or CHEM146. And MATH241; or permission of CMNS-Atmospheric & Oceanic Science department; or permission of CMNS-Chemistry & Biochemistry department. Cross-listed with AOSC633. Credit only granted for: AOSC433, AOSC633, CHEM433, or CHEM633.

The effects of human activity on atmospheric composition, focused on global warming, the carbon cycle, air pollution, and the ozone layer. Fundamentals of atmosphereic chemistry (spectroscopy, kinetics, isotopic analysis, and biogeochemical cycles) are related to the modern understanding of climate chane, air quality, and ozone depletion, based on resources such as satellite missions, field campaigns, and scientific assessments published by international agencies. We also examine how society's energy needs could be met, in the future, in a manner with less impact on atmospheric composition than the present heavy reliance on combusion of fossil fuels.

0101	Ross Salawitch TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 8) ONLINE ONLINE
	Alternating face-to-face/ online class meeting. Please see instructor for details.	

CHEM641 **Organic Reaction Mechanisms**

Credits: 3 Grading Method: Regular, Audit

Jointly offered with CHEM441.

0101	Lyle Isaacs MW 4:00pm - 5:15pm	Seats (Total: 25) ONLINE

CHEM684 **Chemical Thermodynamics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CHEM482; or students who have taken courses with comparable content may contact the department.

0101	John Weeks TuTh 11:00am - 12:15pm	Seats (Total: 16) ONLINE

CHEM689B **Special Topics in Physical Chemistry; Case Studies: Fundamentals and Applications of Nanochemistry**

Credits: 3 Grading Method: Regular, Audit

This special topic will focus on developing advanced research skills through case studies from cutting edge research in nanoscience. The course is open to both graduate students and senior undergraduates in chemistry and other disciplines. By the end of this course, students should have had a firm grasp of the fundamental concepts of nanoscience and developed some of the very basic research skills ready to explore a new subject. Prerequisites: The course will be self-contained, but a familiarity of thermodynamics and undergraduate level quantum chemistry will be helpful. Please seek the consent of the instructor if unsure.

0101	YuHuang Wang TuTh 8:00am - 9:15am	Seats (Total: 20) CHM 1402
0102	YuHuang Wang TuTh 8:00am - 9:15am	Seats (Total: 20) ONLINE

CHEM690 **Quantum Chemistry I**

Credits: 3 Grading Method: Regular, Audit

0101	Leah Dodson TuTh 9:30am - 10:45am	Seats (Total: 25) CHM 1407

CHEM699 **Special Problems in Chemistry**

Credits: 1-6 Grading Method: Regular, Audit

Laboratory experience in a research environment.

Open only to non-thesis Master's degree candidates.

Contact department for information to register for this course.

CHEM799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

CHEM889A **Seminar**

Credits: 1 Grading Method: Regular, Audit

0101	Alice Mignerey W 11:00am - 11:50am	Seats (Total: 15) CHM 0112

CHEM889C **Seminar**

Credits: 1 Grading Method: Regular, Audit

0101	Jeffery Davis Th 11:00am - 11:50am	Seats (Total: 30) ONLINE

CHEM889D **Seminar; Organic**

Credits: 1 Grading Method: Regular, Audit

0101	Jeffery Davis Th 11:00am - 11:50am	Seats (Total: 20) ONLINE

CHEM889E **Seminar; Physical Chemistry**

Credits: 1 Grading Method: Regular, Audit

Cross-listed with CHEM898F and CHPH709A. Credit will be granted for one ofthe following: CHEM889E, CHEM889F, or CHPH709A.

0101	Pratyush Tiwary W 11:00am - 11:50am	Seats (Total: 15) ONLINE

CHEM889F **Seminar; Chemical Physics**

Credits: 1 Grading Method: Regular, Audit

Cross-listed with CHEM898E and CHPH709A. Credit will be granted for one ofthe following: CHEM889E, CHEM889F, or CHPH709A.

0101	Pratyush Tiwary W 11:00am - 11:50am	Seats (Total: 15) ONLINE

CHEM889M **Seminar; Materials Chemistry**

Credits: 1 Grading Method: Regular, Audit

Contact department for information to register for this course.

CHEM898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CHEM899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

CHIN Chinese Fall 2020

CHIN101 **Intensive Elementary Chinese I**

(Perm req)

Credits: 6 Grading Method: Regular

Prerequisite: Must have attained appropriate Foreign Language Placement Test (FLPT) score.

Introduction to speaking, reading, and writing Chinese with an emphasis on mastering the essentials of pronunciation, basic characters and structural patterns.

0101	Guiling Hu, Yuli Wang MWF 10:00am - 10:50am TuTh 9:30am - 10:45am	Seats (Total: 15) ONLINE ONLINE
0201	Yuli Wang, Minglang Zhou MWF 11:00am - 11:50am TuTh 11:00am - 12:15pm	Seats (Total: 15) ONLINE ONLINE
0301	Guiling Hu MWF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 15) ONLINE ONLINE

CHIN169A **Special Topics in Study Abroad I; Elementary Chinese I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN169B **Special Topics in Study Abroad I; Elementary Chinese II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN201 **Intermediate Spoken Chinese I**

(Perm req)

Credits: 3 Grading Method: Regular CORE: HO

Prerequisite: CHIN102; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN202. Additional information: Must be taken in conjunction with CHIN202.

Emphasis on development of conversational skills with vocabulary build-up and controlled conversation.

0101	Jungjung Lee-Heitz MWF 10:00am - 10:50am	Seats (Total: 15) ONLINE
0201	Guiling Hu MWF 2:00pm - 2:50pm	Seats (Total: 15) ONLINE

CHIN202 **Intermediate Written Chinese I**

(Perm req) Credits: 3 Grading Method: Regular CORE: HO General Education: DVCC

Prerequisite: CHIN103; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN201. Additional information: Must be taken in conjunction with CHIN201.

Reading and writing skills with emphasis on grammar and Chinese characters.

0101	Jungjung Lee-Heitz Class time/details on ELMs	Seats (Total: 15) ONLINE
0201	Guiling Hu Class time/details on ELMs	Seats (Total: 15) ONLINE

CHIN203 **Intermediate Spoken Chinese II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: CHIN201; or students who have taken courses with comparable content may contact the department; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN204. Additional information: Must be taken in conjunction with CHIN204.

Continuation of CHIN201.

Contact department for information to register for this course.

CHIN269B **Special Topics in Study Abroad II; Chinese Business Issues and Practices**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN269I **Special Topics in Study Abroad II; Intermediate Spoken Chinese I**

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN269P **Special Topics in Study Abroad II; The China Phenomenon**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN269W **Special Topics in Study Abroad II; Chinese Calligraphy II**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN301 **Advanced Chinese I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHIN202; or students who have taken courses with comparable content may contact the department. And must have taken a placement interview offered by the department for Non-majors.

Readings in expository and fictional writing with conversation and composition.

0101	Jungjung Lee-Heitz MWF 11:00am - 11:50am	Seats (Total: 15) ONLINE
0201	Jungjung Lee-Heitz MWF 1:00pm - 1:50pm	Seats (Total: 15) ONLINE

CHIN307 **Linguistic Landscape of China**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Prerequisite: Must have completed CHIN204 or above; or permission of Chinese Program Advisor.

Comprehensive introduction to Chinese and other major languages in the Sino-Tibetan, Altaic, Austroasiatic, and Austronesian families, all of which are spoken in China. Taught in English.

0101	Minglang Zhou TuTh 9:30am - 10:45am	Seats (Total: 25) ONLINE

CHIN313 **Chinese Poetry and Prose in Translation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Writing of the major poets, essayists, and historians from the 10th century B.C. to the 12th century A.D. No knowledge of Chinese is required.

Contact department for information to register for this course.

CHIN315 **Modern Chinese Literature in Translation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | , D | General Education: DSHU

Major works of fiction and drama from 1920 to the present read in the context of social and literary change. Emphasis on western and traditional Chinese influences on the writers and their works. No knowledge of Chinese required.

0101	Ying Xue Liu	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

CHIN331 **Chinese Calligraphy: Theory and Practice**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHIN220; or permission of instructor.

History of the writing system; major scripts, modes, and styles. Intermediate brushwork and lectures on the culture. Characters for practice selected to correspond to lecture topics. Taught in English.

0101	Yuli Wang	Seats (Total: 20)
	Tu 2:00pm - 4:30pm	ONLINE

CHIN369B **Special Topics in Study Abroad III; Advanced Chinese I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN369C **Special Topics in Study Abroad III; Advanced Chinese II**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN369D **Special Topics in Study Abroad III; Advanced Chinese III**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN369E **Special Topics in Study Abroad III; Advanced Chinese IV**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Must have learning proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

CHIN401 **Readings in Modern Chinese I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHIN302; or students who have taken courses with comparable content may contact the department. And must have taken a placement interview offered by the department for Non-majors.

Readings in history, politics, economics, sociology, and literature. Emphasis on wide-ranging, rapid reading, reinforced by conversations and compositions.

0101	Yuli Wang MWF 3:00pm - 3:50pm	Seats (Total: 15) ONLINE
0201	Yuli Wang MWF 2:00pm - 2:50pm	Seats (Total: 15) ONLINE

CHIN411 **Business Chinese I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHIN402; or permission of ARHU-School of Languages, Literatures, and Cultures department. And must have taken a placement interview offered by the department for Non-majors.

Conversation, reading, and writing applicable to Chinese business transactions, social meetings, and meetings with government organizations, plus background material in English on professional business practices and social customs associated with business.

0101	Jungjung Lee-Heitz MWF 2:00pm - 2:50pm	Seats (Total: 15) ONLINE

CHIN418B **Special Topics in Contemporary Chinese Fiction and Film; Race and Gender in Modern Chinese Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Various approaches to the most recent textual productions of China and Taiwan. Taught in Chinese.

Prerequisite: CHIN401 or equivalent Modernization and Westernization introduced new perceptions of race, gender, and sexuality to China at the turn of the 20th century. This course examines these changing dynamics in literature and media.

0101	Ying Xue Liu TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE

CHIN441 **Traditional Chinese Fiction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department.

Major works of fiction from the 4th century tales of the marvelous through the 19th century Qing novel. Readings are in classical Chinese and English. Designed for students with advanced language skills. Taught in English.

0101	Andrew Schonebaum TuTh 12:30pm - 1:45pm	Seats (Total: 18) ONLINE

CHIN499 **Directed Study in Chinese**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Readings in Chinese under faculty supervision.

Contact department for information to register for this course.

CHPH Chemical Physics Fall 2020

CHPH618 **Special Projects in Chemical Physics**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Independent reading and study covering chemical physics subject areas not available in other courses.

Contact department for information to register for this course.

CHPH709A **Seminar in Chemical Physics; Physical Chemistry**

Credits: 1 Grading Method: Regular, Audit

Current research and developments in chemical physics.

Jointly offered with CHEM898E and CHEM898F. Credit will be granted for o ne ofthe following: CHEM889E, CHEM889F, or CHPH709A.

0101	Pratyush Tiwary	Seats (Total: 15)
	W 11:00am - 11:50am	ONLINE

CHPH709B **Seminar in Chemical Physics; Statistical Physics**

Credits: 1 Grading Method: Regular, Audit

Current research and developments in chemical physics.

Cross-listed with PHYS709.

0101	John Weeks	Seats (Total: 30)
	Tu 1:15pm - 2:30pm	ONLINE

CHPH709L **Seminar in Chemical Physics; Biophysics**

Credits: 1 Grading Method: Regular, Audit

Current research and developments in chemical physics.

0101	Arpita Upadhyaya	Seats (Total: 20)
	M 4:00pm - 5:30pm	ONLINE

CHPH718I **Special Topics in Chemical Physics; Chemical Physics Rotation**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

A discussion of current research problems in chemical physics.

For Chemical Physics Students only.

0101	Wendell Hill Class time/details on ELMs	Seats (Total: 5) ONLINE
0201	Wendell Hill Contact instructor or department for details.	Seats (Total: 10)

CHPH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

CHPH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CHPH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

CLAS Classics Fall 2020

CLAS169M **Special Topics in Study Abroad I; Myths and Legends**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CLAS170 **Greek and Roman Mythology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Cross-listed with RELS170. Credit only granted for: CLAS170 or RELS170. Additional information: This course cannot be taken for language credit.

An introduction to the mythology of ancient Greece and Rome. This course is particularly recommended for students planning to major in foreign languages, English, history, the fine arts, or journalism. Taught in English.

0101	Katherine Wasdin MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 21) ONLINE ONLINE	 Discussion
0102	Katherine Wasdin MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 21) ONLINE ONLINE	 Discussion
0103	Katherine Wasdin MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 21) ONLINE ONLINE	 Discussion
0104	Katherine Wasdin MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 21) ONLINE ONLINE	 Discussion
0105	Katherine Wasdin MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 21) ONLINE ONLINE	 Discussion
0106	Katherine Wasdin MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 21) ONLINE ONLINE	 Discussion
0107	Katherine Wasdin MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 21) ONLINE ONLINE	 Discussion
0108	Katherine Wasdin MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 21) ONLINE ONLINE	 Discussion
0109	Katherine Wasdin MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 22) ONLINE ONLINE	 Discussion
FC01	Madeleine Goh TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 22) ONLINE	

FC02	Madeleine Goh TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 22) ONLINE	
FC03	Madeleine Goh MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 22) ONLINE	
FC04	Talia Chicherio TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 22) ONLINE	
FCB1	William Proffitt W 6:00pm - 7:15pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 22) ONLINE ONLINE	Discussion

CLAS275 **Why do we laugh?**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DSHU, SCIS

Additional information: All readings will be done in English translation.

An introduction to the breadth and complexity of humor's role in society. Students will explore ancient Greek and Roman comedies side-by-side with contemporary sitcoms and movies, to learn the explanations that various disciplines have offered about why we laugh, and to understand the major impact humor has in how we see ourselves and our world.

0101	Francisco Barrenechea TuTh 11:00am - 12:15pm	Seats (Total: 75) ONLINE

CLAS305 **Archaeological Methods and Practice**

Credits: 3 | Grading Method: Regular | General Education: DSHS

Prerequisite: ANTH240, ARTH200, or CLAS180. Cross-listed with: ANTH305, ARTH305, JWST319Y. Credit only granted for: ANTH305, ARTH305, CLAS305, or JWST319Y.

A team-taught, interdisciplinary course discussing theories, methods, and ethical issues in the practice of archaeology.

0101	Jorge Bravo TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

CLAS312 **The Modernity of Athenian Democracy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSHU

Examines the question of how Ancient Greek thought can be a tool for facing the challenges of the modern world. Topics such as political participation and engagement in politics, lawfulness and justice, freedom and autonomy, democracy and civic responsibility are found at the core of Ancient Greek thought. In addition to these topics, the course explores, through the teachings of ancient Greek philosophers, historians, and poets, the questions of virtue and happiness at a personal level and the pursuit of happiness at the societal level. Love and friendship are necessary virtues to shape a harmonious and prosperous polis. By studying selected excerpts from the primary sources of Ancient Greek literature in translation, the course defines the core values of democratic society from the viewpoint of the Greeks.

0101	Polyvia Parara MW 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

CLAS386 **Experiential Learning**

(Perm req)

Credits: 3-6 | Grading Method: Regular, Pass-Fail

Prerequisite: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

CLAS499 **Independent Study in Classical Languages and Literatures**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

CLFS Chemical and Life Sciences Fall 2020

CLFS608 **Seminar in Current Topics in Chemical and Life Science; Scholarly Paper**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Audit

Seminar in current topics in the Life Sciences. Contact Program Director or instructor before registering.

Contact Dr. Brett Kent (bkent@umd.edu) to establish a mentor; and then contact the Office of Extended Studies (oes@umd.edu) to register.

Contact department for information to register for this course.

CLFS608A **Seminar in Current Topics in Chemical and Life Science; Independent Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Seminar in current topics in the Life Sciences. Contact Program Director or instructor before registering.

Contact the Office of Extended Studies (oes@umd.edu) to register.

Contact department for information to register for this course.

CLFS609A **Special Topics; Food Safety and GM Foods**

Credits: 3 Grading Method: Regular, Audit

Individual instruction course. Contact Program Director or instructor before registering.

Must be in Master of Chemical & Life Sciences program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

PL01	Lucinda Jack **Meets August 31, 2020 - November 20, 2020** Class time/details on ELMs	Seats (Total: 15) ONLINE

CLFS609K **Special Topics; Current Topics in Biomedical Research**

Credits: 3 Grading Method: Regular, Audit

Individual instruction course. Contact Program Director or instructor before registering.

Must be in Master of Chemical & Life Sciences program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

PL01	Cristina Banuelos **Meets August 31, 2020 - November 20, 2020** Class time/details on ELMs	Seats (Total: 15) ONLINE

CLFS610 **Natural Products Chemistry**

Credits: 3 Grading Method: Regular

Restriction: Permission of CMNS-Chemical & Life Sciences department. Credit only granted for: LFSC609D or LFSC610. Formerly: LFSC609D.

Foundations of natural products chemistry; how nature goes about making (biosynthesizing) these compounds and elements of enzymology and genomics relevant to production of these compounds; relevance of natural products chemistry as a driving force for drug discovery and innovation in biotechnology.

Must be in Master of Chemical & Life Sciences program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PL01	Marjan Alaghmand **Meets August 31, 2020 - November 20, 2020** Class time/details on ELMs	Seats (Total: 10) ONLINE

CLFS620 **Modern Molecular Genetics**

Credits: 3 Grading Method: Regular, Audit

An overview of genetics including the genetic basis/components in prevalent diseases, genetically engineered organisms and foods, the importance of knowing the complete DNA sequence of organisms.

Must be in Master of Chemical & Life Sciences program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PL01	Paul Bottino **Meets August 31, 2020 - November 20, 2020** Class time/details on ELMs	Seats (Total: 15) ONLINE

CMLT Comparative Literature Fall 2020

CMLT235 **Black Diaspora Literature and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Examination of key works by writers of the African Diaspora. Relationship among black people across multiple geographic spaces; Africa, the Caribbean, the United States, Europe, Latin America, and Asia. Specific historical, cultural, and literary contexts; themes such as gender, sexuality, migration, slavery, freedom, and equality. Readings may include literary texts (fiction, poetry, drama), music and film. All readings in English, but drawn from multiple languages of the black diaspora, including English, Spanish, French and Portuguese.

0101	Nancy Vera Class time/details on ELMs	Seats (Total: 30) ONLINE

CMLT269C **Special Topics in Study Abroad II; Modern Catalan Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CMLT270 **Global Literature and Social Change**

Credits: 3 Grading Method: Regular CORE: HL, D General Education: DSHU, DVUP

Comparative study of literature through selected literary works from several non-Western cultures, viewed cross-culturally in light of particular social, political, and economic perspectives.

0101	Tung-An Wei TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE
0201	Alexandria Nunn MWF 11:00am - 11:50am	Seats (Total: 30) ONLINE

CMLT275 **World Literature by Women**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with: WGSS275. Credit only granted for: WMST275, CMLT275 or WGSS275. Formerly: WMST275.

Comparative study of selected works by women writers of several countries, exploring points of intersection and divergence in women's literary representations.

0201	Sara Faradji MW 2:00pm - 3:15pm	Seats (Total: 30) ONLINE

0301	Fatima Taha TuTh 5:00pm - 6:15pm	Seats (Total: 30) ONLINE

CMLT277 **Literatures of the Americas**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Comparative study of several North, South, and Central American cultures with a focus on the specificities, similarities, and divergences of their literary and cultural texts.

0101	Nancy Vera Class time/details on ELMs	Seats (Total: 30) ONLINE

CMLT280 **Film Art in a Global Society**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA, D | General Education: DSHU, DVUP

Cross-listed with: CINE280. Credit only granted for: CINE280, FILM298D or CMLT280. Formerly: FILM298D.

Comparative study of a variety of film traditions from around the world, including cinema from Hollywood, Europe, Asia and developing countries, with a stress on different cultural contexts for film-making and viewing.

Cross-listed with FILM298D. Credit only granted for: CMLT280 or FILM298D.

0101	Kyle Bickoff MWF 1:00pm - 1:50pm	Seats (Total: 30) ONLINE
0201	William Pittman TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE

CMLT369A **Special Topics in Study Abroad III; Postcolonial Literatures in English I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CMLT369T **Special Topics in Study Abroad III; Politics and Literature in the 20th Century**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CMLT369X **Special Topics in Study Abroad III; Shakespeare and Lope de Vega**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CMLT386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-English department.

Contact department for information to register for this course.

CMLT398L **Special Topics in Comparative Studies; Sexuality in the Cinema**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in comparitive studies.

Cross-listed with ENGL329C. Credit will be granted for only one of the following: CMLT398L, CMLT498L, or ENGL329C.

0101	Eugene Robinson	Seats (Total: 27)
	Class time/details on ELMs	ONLINE

CMLT398M **Special Topics in Comparative Studies; Digital Publishing with Minimal Computing: Humanities at a Global Scale**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in comparitive studies.

Cross-listed with MITH301, ENGL378M, and LASC348C. Credit granted for MITH301, CMLT398M, ENGL378M, or LASC348C.

0101	Raffaele Viglianti	Seats (Total: 15)
	W 12:00pm - 1:50pm	ONLINE
	F 12:00pm - 12:50pm	ONLINE

CMLT398N **Special Topics in Comparative Studies; Gypsy Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in comparitive studies.

Cross-listed with ENGL379V. Credit will be granted for only one of the following: CMLT398N, CMLT498N, or ENGL379V.

0101	Eugene Robinson	Seats (Total: 27)
	Class time/details on ELMs	ONLINE

CMLT398T **Special Topics in Comparative Studies; Postcolonial Literature in English I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in comparitive studies.

Contact department for information to register for this course.

CMLT498V **Selected Topics in Comparative Studies; Lost in Translation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

CMLT679E **Topics in Comparative Studies; Ruins: Literatures and Theories of Decay**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Seminar in modern and contemporary literature: as announced.

Credit granted for CMLT679E or ENGL702.

0101	Kari Kraus	Seats (Total: 9)
	W 3:30pm - 6:00pm	ONLINE

CMLT679T **Topics in Comparative Studies; Seminar in Poetry Translation**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Seminar in modern and contemporary literature: as announced.

Cross-listed with ENGL479Y. Credit granted for ENGL479Y or CMLT679T.

0101	Michael Collier	Seats (Total: 22)
	Tu 3:30pm - 6:00pm	ONLINE

CMLT699 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular

Research and writing on specific readings on a topic selected by the student which is approved and supervised by a faculty member.

Contact department for information to register for this course.

CMLT799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

CMLT898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CMLT899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

CMSC Computer Science Fall 2020

CMSC101 **Introduction to Immersive Media**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of CMNS-Computer Science department. Additional information: Hybrid studio/lecture course in which students will work collaboratively in teams to complete both research and practical projects related to the field.

Introduction to basic practices, concepts, and issues relevant to the field of Immersive Media Design.

0101	Mollye Bendell	Seats (Total: 30)	
	TuTh 12:30pm - 1:45pm	ONLINE	

CMSC106 **Introduction to C Programming**

Credits: 4 Grading Method: Regular

Prerequisite: MATH115. Restriction: Must not be in Computer Science program; and must not have completed any courses from CMSC131-499 course range. Credit only granted for: CMSC106 or CMSC122.

Design and analysis of programs in C. An introduction to computing using structured programming concepts. Intended for students with no or minimal programming experience.

0101	Ilchul Yoon	Seats (Total: 48)	
	MW 3:30pm - 4:45pm	ONLINE	
	MW 5:00pm - 5:50pm	ONLINE	Discussion

CMSC122 **Introduction to Computer Programming via the Web**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: IE General Education: DSSP

Restriction: Must not have completed any courses from CMSC131-499 course range; and must not be concurrently enrolled in CMSC131. Credit only granted for: CMSC106, or CMSC122.

Introduction to computer programming in the context of developing full featured dynamic web sites. Uses a problem solving approach to teach basics of program design and implementation using JavaScript; relates these skills to creation of dynamic web sites; then explores both the potential and limits of web-based information sources for use in research. Intended to help relate a student's major to these emerging technologies.

0101	Ilchul Yoon	Seats (Total: 125)	
	MWF 11:00am - 11:50am	ONLINE	

CMSC131 **Object-Oriented Programming I**

Credits: 4 Grading Method: Regular

Corequisite: MATH140.

Introduction to programming and computer science. Emphasizes understanding and implementation of applications using object-oriented techniques. Develops skills such as program design and testing as well as implementation of programs using a graphical IDE. Programming done in Java.

0101	Nelson Padua-Perez MWF 10:00am - 10:50am MW 11:00am - 11:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0102	Nelson Padua-Perez MWF 10:00am - 10:50am MW 12:00pm - 12:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0103	Nelson Padua-Perez MWF 10:00am - 10:50am MW 1:00pm - 1:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0104	Nelson Padua-Perez MWF 10:00am - 10:50am MW 2:00pm - 2:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0105	Nelson Padua-Perez MWF 10:00am - 10:50am MW 3:00pm - 3:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0106	Nelson Padua-Perez MWF 10:00am - 10:50am MW 4:00pm - 4:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0107	Nelson Padua-Perez MWF 10:00am - 10:50am MW 5:00pm - 5:50pm	Seats (Total: 36) ONLINE ONLINE	 Discussion
0108	Nelson Padua-Perez MWF 10:00am - 10:50am MW 2:00pm - 2:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0109	Nelson Padua-Perez MWF 10:00am - 10:50am MW 3:00pm - 3:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0201	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 8:00am - 8:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion

0202	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 9:30am - 10:20am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0203	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0204	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 12:30pm - 1:20pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0205	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0206	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 3:30pm - 4:20pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0207	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 5:00pm - 5:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0208	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 8:00am - 8:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0209	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 9:30am - 10:20am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0301	Nelson Padua-Perez MWF 9:00am - 9:50am MW 10:00am - 10:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0302	Nelson Padua-Perez MWF 9:00am - 9:50am MW 11:00am - 11:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion

0303	Nelson Padua-Perez MWF 9:00am - 9:50am MW 12:00pm - 12:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0304	Nelson Padua-Perez MWF 9:00am - 9:50am MW 1:00pm - 1:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0305	Nelson Padua-Perez MWF 9:00am - 9:50am MW 2:00pm - 2:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0306	Nelson Padua-Perez MWF 9:00am - 9:50am MW 3:00pm - 3:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0307	Nelson Padua-Perez MWF 9:00am - 9:50am MW 4:00pm - 4:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0308	Nelson Padua-Perez MWF 9:00am - 9:50am MW 5:00pm - 5:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0309	Nelson Padua-Perez MWF 9:00am - 9:50am MW 10:00am - 10:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0401	Fawzi Emad MWF 11:00am - 11:50am TuTh 8:00am - 8:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0402	Fawzi Emad MWF 11:00am - 11:50am TuTh 9:30am - 10:20am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0403	Fawzi Emad MWF 11:00am - 11:50am TuTh 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion

0404	Fawzi Emad MWF 11:00am - 11:50am TuTh 12:30pm - 1:20pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0405	Fawzi Emad MWF 11:00am - 11:50am TuTh 2:00pm - 2:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0406	Fawzi Emad MWF 11:00am - 11:50am TuTh 3:30pm - 4:20pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0407	Fawzi Emad MWF 11:00am - 11:50am TuTh 5:00pm - 5:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0408	Fawzi Emad MWF 11:00am - 11:50am TuTh 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0409	Fawzi Emad MWF 11:00am - 11:50am TuTh 8:00am - 8:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0410	Fawzi Emad MWF 11:00am - 11:50am TuTh 9:30am - 10:20am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0501	Fawzi Emad MWF 1:00pm - 1:50pm TuTh 5:00pm - 5:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0502	Fawzi Emad MWF 1:00pm - 1:50pm TuTh 12:30pm - 1:20pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0503	Fawzi Emad MWF 1:00pm - 1:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

0504	Fawzi Emad MWF 1:00pm - 1:50pm TuTh 3:30pm - 4:20pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
FC01	Nelson Padua-Perez MW 6:00pm - 7:15pm TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 120) ONLINE ONLINE	 Discussion

CMSC132 **Object-Oriented Programming II**

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC131; or must have earned a score of 5 on the A Java AP exam; or must have earned a satisfactory score on the departmental placement exam. And minimum grade of C- in MATH140.

Introduction to use of computers to solve problems using software engineering principles. Design, build, test, and debug medium -size software systems and learn to use relevant tools. Use object-oriented methods to create effective and efficient problem solutions. Use and implement application programming interfaces (APIs). Programming done in Java.

0101	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 12:00pm - 12:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0102	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 8:00am - 8:50am	Seats (Total: 34) ONLINE ONLINE	 Discussion
0103	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 9:00am - 9:50am	Seats (Total: 34) ONLINE ONLINE	 Discussion
0104	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 12:00pm - 12:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0105	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 10:00am - 10:50am	Seats (Total: 34) ONLINE ONLINE	 Discussion

0106	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 11:00am - 11:50am	Seats (Total: 34) ONLINE ONLINE	 Discussion
0107	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 9:00am - 9:50am	Seats (Total: 34) ONLINE ONLINE	 Discussion
0108	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 8:00am - 8:50am	Seats (Total: 34) ONLINE ONLINE	 Discussion
0201	Pedram Sadeghian MWF 1:00pm - 1:50pm MW 9:00am - 9:50am	Seats (Total: 36) ONLINE ONLINE	 Discussion
0202	Pedram Sadeghian MWF 1:00pm - 1:50pm MW 12:00pm - 12:50pm	Seats (Total: 36) ONLINE ONLINE	 Discussion
0203	Pedram Sadeghian MWF 1:00pm - 1:50pm MW 9:00am - 9:50am	Seats (Total: 36) ONLINE ONLINE	 Discussion
0204	Pedram Sadeghian MWF 1:00pm - 1:50pm MW 8:00am - 8:50am	Seats (Total: 36) ONLINE ONLINE	 Discussion
0205	Pedram Sadeghian MWF 1:00pm - 1:50pm MW 11:00am - 11:50am	Seats (Total: 36) ONLINE ONLINE	 Discussion
0206	Pedram Sadeghian MWF 1:00pm - 1:50pm MW 11:00am - 11:50am	Seats (Total: 36) ONLINE ONLINE	 Discussion
0207	Pedram Sadeghian MWF 1:00pm - 1:50pm MW 10:00am - 10:50am	Seats (Total: 36) ONLINE ONLINE	 Discussion

0301	Pedram Sadeghian MWF 12:00pm - 12:50pm MW 8:00am - 8:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0302	Pedram Sadeghian MWF 12:00pm - 12:50pm MW 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0303	Pedram Sadeghian MWF 12:00pm - 12:50pm MW 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0304	Pedram Sadeghian MWF 12:00pm - 12:50pm MW 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

CMSC133 **Object Oriented Programming I Beyond Fundamentals**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail

Corequisite: MATH140. Restriction: Permission of CMNS-Computer Science department; and student must have earned a 4 on the AP Computer Science A exam or a satisfactory score on the CMSC131 department placement exam. Credit only granted for: CMSC131 or CMSC133.

An introduction to computer science and object-oriented programming for students with prior Java programming knowledge (conditionals, loops, methods). Program design, implementation, and testing using object-oriented techniques. All programming will be done in Java using a graphical IDE.

0101	Swati Singhal M 5:00pm - 6:15pm F 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Swati Singhal M 5:00pm - 6:15pm F 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

CMSC216 **Introduction to Computer Systems**

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC132; and minimum grade of C- in MATH141. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program.

Introduction to the interaction between user programs and the operating system/hardware. Major topics include C programming, introductory systems programming, and assembly language. Other concepts covered include UNIX, machine data representation, thread management, optimization, and virtual memory. Programming is done in the Linux Environment.

0101	Larry Herman TuTh 11:00am - 12:15pm MW 12:00pm - 12:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0102	Larry Herman TuTh 11:00am - 12:15pm MW 3:00pm - 3:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0103	Larry Herman TuTh 11:00am - 12:15pm MW 9:00am - 9:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0104	Larry Herman TuTh 11:00am - 12:15pm MW 11:00am - 11:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0105	Larry Herman TuTh 11:00am - 12:15pm MW 9:00am - 9:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0106	Larry Herman TuTh 11:00am - 12:15pm MW 2:00pm - 2:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0107	Larry Herman TuTh 11:00am - 12:15pm MW 4:00pm - 4:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0108	Larry Herman TuTh 11:00am - 12:15pm MW 2:00pm - 2:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0201	Larry Herman TuTh 2:00pm - 3:15pm MW 3:00pm - 3:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion

0202	Larry Herman TuTh 2:00pm - 3:15pm MW 1:00pm - 1:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0203	Larry Herman TuTh 2:00pm - 3:15pm MW 8:00am - 8:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0204	Larry Herman TuTh 2:00pm - 3:15pm MW 5:00pm - 5:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0205	Larry Herman TuTh 2:00pm - 3:15pm MW 12:00pm - 12:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0206	Larry Herman TuTh 2:00pm - 3:15pm MW 4:00pm - 4:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0207	Larry Herman TuTh 2:00pm - 3:15pm MW 10:00am - 10:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0208	Larry Herman TuTh 2:00pm - 3:15pm MW 5:00pm - 5:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0301	A Shankar TuTh 12:30pm - 1:45pm MW 9:00am - 9:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0302	A Shankar TuTh 12:30pm - 1:45pm MW 11:00am - 11:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0303	A Shankar TuTh 12:30pm - 1:45pm MW 8:00am - 8:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion

0304	A Shankar TuTh 12:30pm - 1:45pm MW 10:00am - 10:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion

CMSC250 **Discrete Structures**

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC131; and minimum grade of C- in MATH141. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program. Formerly: CMSC150.

Fundamental mathematical concepts related to computer science, including finite and infinite sets, relations, functions, and propositional logic. Introduction to other techniques, modeling and solving problems in computer science. Introduction to permutations, combinations, graphs, and trees with selected applications.

0101	Roger Eastman TuTh 3:30pm - 4:45pm MW 4:00pm - 4:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0102	Roger Eastman TuTh 3:30pm - 4:45pm MW 1:00pm - 1:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0103	Roger Eastman TuTh 3:30pm - 4:45pm MW 12:00pm - 12:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0104	Roger Eastman TuTh 3:30pm - 4:45pm MW 10:00am - 10:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0105	Roger Eastman TuTh 3:30pm - 4:45pm MW 8:00am - 8:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0106	Roger Eastman TuTh 3:30pm - 4:45pm MW 4:00pm - 4:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion

0107	Roger Eastman TuTh 3:30pm - 4:45pm MW 2:00pm - 2:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0108	Roger Eastman TuTh 3:30pm - 4:45pm MW 10:00am - 10:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0201	Justin Wyss-Gallifent TuTh 12:30pm - 1:45pm MW 2:00pm - 2:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0202	Justin Wyss-Gallifent TuTh 12:30pm - 1:45pm MW 10:00am - 10:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0203	Justin Wyss-Gallifent TuTh 12:30pm - 1:45pm MW 11:00am - 11:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0204	Justin Wyss-Gallifent TuTh 12:30pm - 1:45pm MW 12:00pm - 12:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0205	Justin Wyss-Gallifent TuTh 12:30pm - 1:45pm MW 8:00am - 8:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0206	Justin Wyss-Gallifent TuTh 12:30pm - 1:45pm MW 9:00am - 9:50am	Seats (Total: 38) ONLINE ONLINE	 Discussion
0207	Justin Wyss-Gallifent TuTh 12:30pm - 1:45pm MW 1:00pm - 1:50pm	Seats (Total: 36) ONLINE ONLINE	 Discussion
0208	Justin Wyss-Gallifent TuTh 12:30pm - 1:45pm MW 12:00pm - 12:50pm	Seats (Total: 36) ONLINE ONLINE	 Discussion

CMSC298A **Special Topics in Computer Science**

(Perm req)

Credits: 1-4 Grading Method: Sat-Fail

A course designed to allow a lower level student to pursue a specialized topic or project.

Contact department for information to register for this course.

CMSC298X **Special Topics in Computer Science; Introduction to Computer Science**

Credits: 4 Grading Method: Sat-Fail

A course designed to allow a lower level student to pursue a specialized topic or project.

Contact department for information to register for this course.

CMSC320 **Introduction to Data Science**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC216 and CMSC250. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: STAT426 or CMSC320.

An introduction to the data science pipeline, i.e., the end-to-end process of going from unstructured, messy data to knowledge and actionable insights. Provides a broad overview of several topics including statistical data analysis, basic data mining and machine learning algorithms, large-scale data management, cloud computing, and information visualization.

0101	John Dickerson TuTh 5:00pm - 6:15pm	Seats (Total: 250) ONLINE
0201	Mohammad Nayeem Teli TuTh 11:00am - 12:15pm	Seats (Total: 140) ONLINE

CMSC330 **Organization of Programming Languages**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in the Computer Science Minor program; or must be in Engineering: Computer program.

A study of programming languages, including their syntax, semantics, and implementation. Several different models of languages are discussed, including dynamic, scripting (e.g., Ruby, Python) functional (e.g., OCaml, Haskell, Scheme), and memory safe systems programming (e.g., Rust). Explores language features such as formal syntax, scoping and binding of variables, higher-order programming, typing, and type polymorphism. Introduces finite automata, context free grammar, parsing, lambda calculus, and basics of security attacks and software security.

0101	Anwar Mamat TuTh 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0102	Anwar Mamat TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0103	Anwar Mamat TuTh 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0104	Anwar Mamat TuTh 11:00am - 12:15pm F 3:00pm - 3:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0105	Anwar Mamat TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0106	Anwar Mamat TuTh 11:00am - 12:15pm F 4:00pm - 4:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0107	Anwar Mamat TuTh 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0108	Anwar Mamat TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0109	Anwar Mamat TuTh 11:00am - 12:15pm F 4:00pm - 4:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0201	David Van Horn TuTh 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion

0202	David Van Horn TuTh 9:30am - 10:45am F 3:00pm - 3:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0203	David Van Horn TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 34) ONLINE ONLINE	 Discussion
0204	David Van Horn TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 34) ONLINE ONLINE	 Discussion
0205	David Van Horn TuTh 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0206	David Van Horn TuTh 9:30am - 10:45am F 3:00pm - 3:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0207	David Van Horn TuTh 9:30am - 10:45am F 4:00pm - 4:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0208	David Van Horn TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0209	David Van Horn TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion

CMSC351 **Algorithms**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program. Credit only granted for: CMSC251 or CMSC351. Additional information: CMSC351 may not count as one of the required upper level CMSC courses for students who are required to have 24 upper level CMSC credits for graduation, i.e. for students who became computer science majors prior to Fall, 2002.

A systematic study of the complexity of some elementary algorithms related to sorting, graphs and trees, and combinatorics. Algorithms are analyzed using mathematical techniques to solve recurrences and summations.

0101	Clyde Kruskal MWF 2:00pm - 2:50pm	Seats (Total: 260) ONLINE
0201	Clyde Kruskal MWF 4:00pm - 4:50pm	Seats (Total: 260) ONLINE
0301	Mohammad Nayeem Teli MWF 10:00am - 10:50am	Seats (Total: 120) ONLINE

CMSC388J **Special Topics in Computer Science; Building Secure Web Applications with Python and Flask**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216. Students are introduced to building secure, full-stack web applications with Python and Flask. Different types of security vulnerabilities and best practices to patch in students own applications will be examined.

0101	Michael Marsh W 5:00pm - 5:50pm	Seats (Total: 38) ONLINE

CMSC389A **Special Topics in Computer Science; Law and Computer Science**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216.

0101	Neil Spring F 10:00am - 10:50am	Seats (Total: 15) ONLINE

CMSC389B **Special Topics in Computer Science; A Tour of Programming Languages**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216.

0101	David Van Horn F 11:00am - 11:50am	Seats (Total: 30) ONLINE

CMSC389E **Special Topics in Computer Science; Digital Logic Design through Minecraft**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216.

0101	Anwar Mamat F 11:00am - 11:50am	Seats (Total: 30) ONLINE

CMSC389N **Special Topics in Computer Science; Introduction to PHP and Javascript**

(Perm req)

Credits: 3 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216; and permission of CMNS-Computer Science department.

0101	Ilchul Yoon TuTh 2:00pm - 3:15pm	Seats (Total: 120) ONLINE

CMSC389O **Special Topics in Computer Science; The Coding Interview**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216.

0101	Thomas Goldstein F 10:00am - 10:50am	Seats (Total: 30) ONLINE

0201	Thomas Goldstein F 11:00am - 11:50am	Seats (Total: 30) ONLINE
0301	Thomas Goldstein F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE
0401	Thomas Goldstein F 1:00pm - 1:50pm	Seats (Total: 30) ONLINE

CMSC389P **Special Topics in Computer Science; Mastering the PM Interview**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216. Students are introduced to the tools, techniques, and resources to nail their PM interviews. Also, it helps students prepare for interviews by providing hands-on practice with PM-specific topics including product design, analytical, and case questions.

0101	Michelle Mazurek F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE

CMSC389V **Special Topics in Computer Science; Ethics of Artificial Intelligence and Machine Learning**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216.

0101	John Dickerson F 1:00pm - 1:50pm	Seats (Total: 30) ONLINE

CMSC389W **Special Topics in Computer Science; Visualization through Mathematica**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Jointly offered with MATH299M. Credit only granted for CMSC389W or MATH299M. Prerequisites: CMSC216 and CMSC250 with a grade of C- or better; and permission of the Computer Science department.

0101	Pedram Sadeghian	Seats (Total: 30)
	F 1:00pm - 1:50pm	ONLINE

CMSC390 **Honors Paper**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be admitted to the Computer Science Honors Program.

Special study or research directed toward preparation of honors paper.

Contact department for information to register for this course.

CMSC396H **Computer Science Honors Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: Must have admission into Computer Science Departmental Honors Program. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: CMSC297 or CMSC396. Formerly: CMSC297.

Overview of computer science research activities, techniques, and tools. Diverse research areas will be covered, including systems, networks, artificial intelligence, human-computer interaction, software engineering, graphics, vision, and theory.

0101	Dave Levin, Leilani Battle	Seats (Total: 50)
	W 1:00pm - 1:50pm	ONLINE

CMSC411 **Computer Systems Architecture**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: ENEE446 or CMSC411.

Input/output processors and techniques. Intra-system communication, buses, caches. Addressing and memory hierarchies. Microprogramming, parallelism, and pipelining.

0101	Michelle Hugue	Seats (Total: 175)
	Class time/details on ELMs	ONLINE

CMSC412 **Operating Systems**

(Perm req)

Credits: 4 Grading Method: Regular CORE: CS

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; and 1 course with a minimum grade of C- from (CMSC414, CMSC417, CMSC420, CMSC430, CMSC433, CMSC435, ENEE440, ENEE457). Restriction: Permission of CMNS-Computer Science department; or must be in one of the following programs (Computer Science (Master's); Computer Science (Doctoral)). Credit only granted for: CMSC412 or ENEE447.

A hands-on introduction to operating systems, including topics in: multiprogramming, communication and synchronization, memory management, IO subsystems, and resource scheduling polices. The laboratory component consists of constructing a small kernel, including functions for device IO, multi-tasking, and memory management.

0101	Ashok Agrawala TuTh 11:00am - 12:15pm MW 12:00pm - 12:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0102	Ashok Agrawala TuTh 11:00am - 12:15pm MW 1:00pm - 1:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion

CMSC414 **Computer and Network Security**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: CMSC414, ENEE459C, or ENEE457.

An introduction to the topic of security in the context of computer systems and networks. Identify, analyze, and solve network-related security problems in computer systems. Fundamentals of number theory, authentication, and encryption technologies, as well as the practical problems that have to be solved in order to make those technologies workable in a networked environment, particularly in the wide-area Internet environment.

0101	Michael Marsh MW 2:00pm - 3:15pm	Seats (Total: 102) ONLINE	
0201	Dave Levin MW 3:30pm - 4:45pm	Seats (Total: 110) ONLINE	

CMSC417 **Computer Networks**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Computer networks and architectures. The OSI model including discussion and examples of various network layers. A general introduction to existing network protocols. Communication protocol specification, analysis, and testing.

0101	Samrat Bhattacharjee TuTh 2:00pm - 3:15pm	Seats (Total: 105) ONLINE

CMSC420 **Advanced Data Structures**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Description, properties, and storage allocation functions of data structures including balanced binary trees, B-Trees, hash tables, skiplists, tries, KD-Trees and Quadtrees. Algorithms for manipulating structures. Applications from areas such as String Processing, Computer Graphics, Information Retrieval, Computer Networks, Computer Vision, and Operating Systems.

0101	Michael Marsh MW 3:30pm - 4:45pm	Seats (Total: 150) ONLINE
0201	David Mount TuTh 11:00am - 12:15pm	Seats (Total: 170) ONLINE
0301	Hanan Samet TuTh 9:30am - 10:45am	Seats (Total: 50) ONLINE

CMSC421 **Introduction to Artificial Intelligence**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Introduces a range of ideas and methods in AI, varying semester to semester but chosen largely from: automated heuristic search, planning, games, knowledge representation, logical and statistical inference, learning, natural language processing, vision, robotics, cognitive modeling, and intelligent agents. Programming projects will help students obtain a hands-on feel for various topics.

0101	William Regli	Seats (Total: 145)
	MW 5:00pm - 6:15pm	ONLINE

CMSC422 **Introduction to Machine Learning**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC320, CMSC330, and CMSC351; and 1 course with a minimum grade of C- from (MATH240, MATH461); and permission of CMNS-Computer Science department.

Machine Learning studies representations and algorithms that allow machines to improve their performance on a task from experience. This is a broad overview of existing methods for machine learning and an introduction to adaptive systems in general. Emphasis is given to practical aspects of machine learning and data mining.

0101	David Jacobs	Seats (Total: 95)
	TuTh 11:00am - 12:15pm	ONLINE
0201	Ramani Duraiswami	Seats (Total: 95)
	TuTh 3:30pm - 4:45pm	ONLINE

CMSC423 **Bioinformatic Algorithms, Databases, and Tools**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

An introduction to the main algorithms, databases, and tools used in bioinformatics. Topics may include assembly and analysis of genome sequences, reconstructing evolutionary histories, predicting protein structure, and clustering of biological data. Use of scripting languages to perform analysis tasks on biological data. No prior knowledge of biology is assumed.

0101	Mihai Pop	Seats (Total: 85)
	TuTh 11:00am - 12:15pm	ONLINE

CMSC424 **Database Design**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Students are introduced to database systems and motivates the database approach as a mechanism for modeling the real world. An in-depth coverage of the relational model, logical database design, query languages, and other database concepts including query optimization, concurrency control; transaction management, and log based crash recovery. Distributed and Web database architectures are also discussed.

0101	Amol Deshpande	Seats (Total: 165)
	TuTh 2:00pm - 3:15pm	ONLINE

CMSC425 **Game Programming**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC420.

An introduction to the principles and practice of computer game programming and design. This includes an introduction to game hardware and systems, the principles of game design, object and terrain modeling, game physics, artificial intelligence for games, networking for games, rendering and animation, and aural rendering. Course topics are reinforced through the design and implementation of a working computer game.

0101	Stevens Miller	Seats (Total: 85)
	TuTh 12:30pm - 1:45pm	ONLINE

CMSC426 **Computer Vision**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department.

An introduction to basic concepts and techniques in computervision. This includes low-level operations such as image filtering and edge detection, 3D reconstruction of scenes using stereo and structure from motion, and object detection, recognition and classification.

0101	John Aloimonos	Seats (Total: 150)
	TuTh 12:30pm - 1:45pm	ONLINE

CMSC427 **Computer Graphics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: MATH240; and minimum grade of C- in CMSC420; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

An introduction to 3D computer graphics, focusing on the underlying building blocks and algorithms for applications such as 3D computer games, and augmented and virtual reality (AR/VR). Covers the basics of 3D image generation and 3D modeling, with an emphasis on interactive applications. Discusses the representation of 3D geometry, 3D transformations, projections, rasterization, basics of color spaces, texturing and lighting models, as well as programming of modern Graphics Processing Units (GPUs). Includes programming projects where students build their own 3D rendering engine step-by-step.

0101	Roger Eastman	Seats (Total: 51)
	TuTh 2:00pm - 3:15pm	ONLINE

CMSC430 **Introduction to Compilers**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Topics include lexical analysis, parsing, intermediate representations, program analysis, optimization, and code generation.

0101	Jose Calderon	Seats (Total: 87)
	TuTh 2:00pm - 3:15pm	ONLINE

CMSC433 **Programming Language Technologies and Paradigms**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department.

Programming language technologies (e.g., object-oriented programming), their implementations and use in software design and implementation.

0101	Anwar Mamat	Seats (Total: 200)
	TuTh 9:30am - 10:45am	ONLINE

CMSC434 **Introduction to Human-Computer Interaction**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Assess usability by quantitative and qualitative methods. Conduct task analyses, usability tests, expert reviews, and continuing assessments of working products by interviews, surveys, and logging. Apply design processes and guidelines to develop professional quality user interfaces. Build low-fidelity paper mockups, and a high-fidelity prototype using contemporary tools such as graphic editors and a graphical programming environment (eg: Visual Basic, Java).

0101	Evan Golub TuTh 11:00am - 12:15pm	Seats (Total: 56) ONLINE
0201	Evan Golub TuTh 12:30pm - 1:45pm	Seats (Total: 56) ONLINE

CMSC435 **Software Engineering**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: 1 course with a minimum grade of C- from (CMSC412, CMSC417, CMSC420, CMSC430, CMSC433); and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

State-of-the-art techniques in software design and development. Laboratory experience in applying the techniques covered. Structured design, structured programming, top-down design and development, segmentation and modularization techniques, iterative enhancement, design and code inspection techniques, correctness, and chief-programmer teams. The development of a large software project.

0101	James Purtilo TuTh 2:00pm - 3:15pm	Seats (Total: 48) ONLINE

CMSC436 **Programming Handheld Systems**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department.

Fundamental principles and concepts that underlie the programming of handheld systems, such as mobile phones, personal digital assistants, and tablet computers. Particular emphasis will be placed on concepts such as limited display size, power, memory and CPU speed; and new input modalities, where handheld systems differ substantially from non-handheld systems, and thus require special programming tools and approaches. Students will apply these concepts and principles in the context of an existing handset programming platform.

0101	Adam Porter TuTh 11:00am - 12:15pm	Seats (Total: 200) ONLINE

CMSC451 **Design and Analysis of Computer Algorithms**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Fundamental techniques for designing efficient computer algorithms, proving their correctness, and analyzing their complexity. General topics include graph algorithms, basic algorithm design paradigms (such as greedy algorithms, divide-and-conquer, and dynamic programming), network flows, NP-completeness, and other selected topics in algorithms.

0101	Andrew Childs TuTh 2:00pm - 3:15pm	Seats (Total: 150) ONLINE
0201	Jonathan Katz TuTh 9:30am - 10:45am	Seats (Total: 100) ONLINE

CMSC456 **Cryptography**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: (CMSC106, CMSC131, or ENEE150; or equivalent programming experience); and (2 courses from (CMSC330, CMSC351, ENEE324, or ENEE380); or any one of these courses and a 400-level MATH course, or two 400-level MATH courses). Or permission of instructor. Also offered as: MATH456, ENEE456. Credit only granted for: MATH456, CMSC456, or ENEE456.

The theory, application, and implementation of mathematical techniques used to secure modern communications. Topics include symmetric and public-key encryption, message integrity, hash functions, block-cipher design and analysis, number theory, and digital signatures.

0101	Jeffrey Adams MWF 11:00am - 11:50am	Seats (Total: 50) ONLINE

0201	William Gasarch MW 3:30pm - 4:45pm	Seats (Total: 85) ONLINE

CMSC460 **Computational Methods**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH246. Also offered as: AMSC460. Credit only granted for: AMSC460, AMSC466, CMSC460, or CMSC466.

Basic computational methods for interpolation, least squares, approximation, numerical quadrature, numerical solution of polynomial and transcendental equations, systems of linear equations and initial value problems for ordinary differential equations. Emphasis on methods and their computational properties rather than their analytic aspects. Intended primarily for students in the physical and engineering sciences.

0101	Howard Elman MW 2:00pm - 3:15pm	Seats (Total: 35) ONLINE
0201	Stefan Doboszczak TuTh 11:00am - 12:15pm	Seats (Total: 35) ONLINE
0301	Vladimir Yushutin TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE
0401	Tobias von Petersdorff TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

CMSC466 **Introduction to Numerical Analysis I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH410. Also offered as: AMSC466. Credit only granted for: AMSC460, CMSC460, AMSC466, or CMSC466.

Floating point computations, direct methods for linear systems, interpolation, solution of nonlinear equations.

0101	Dionisios Margetis TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE

CMSC475 **Combinatorics and Graph Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340). And permission of CMNS-Computer Science department; or permission of CMNS-Mathematics department. Cross-listed with MATH475 .

General enumeration methods, difference equations, generating functions. Elements of graph theory, matrix representations of graphs, applications of graph theory to transport networks, matching theory and graphical algorithms.

Credit only granted for MATH475 or CMSC475.

0101	Wiseley Wong	Seats (Total: 40)
	MWF 10:00am - 10:50am	ONLINE

CMSC498A **Selected Topics in Computer Science**

(Perm req)

Credits: 1-3 Grading Method: Regular

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Contact department for information to register for this course.

CMSC498P **Selected Topics in Computer Science; Machine Learning Capstone**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Prerequisite: CMSC422 and permission of instructor. In this class, students will work either individually or in teams to complete a research or software development project involving machine learning or a closely related field. Students are encouraged to choose from a number of potential projects that will be proposed by tech companies, or else develop their own project with the approval of the instructor. Students are responsible for presenting the proposed project to the class and providing detailed documentation for the results of research. Grades will be assigned based on the quality of the project document, substance and quality of the project results, and feedback from project advisors.

0101	Thomas Goldstein	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

CMSC498X **Selected Topics in Computer Science; Introduction to Parallel Computing**

(Perm req)

Credits: 3 Grading Method: Regular

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or permission of instructor. Introduction to parallel computing for computer science majors. Topics include programming for shared memory and distributed memory parallel architectures, and fundamental issues in design, development and analysis of parallel programs.

0101	Abhinav Bhatele	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

CMSC499A **Independent Undergraduate Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

Students are provided with an opportunity to participate in a computer science research project under the guidance of a faculty advisor. Format varies. Students and supervising faculty member will agree to a research plan which must be approved by the department. As part of each research plan, students should produce a final paper delineating their contribution to the field.

Contact department for information to register for this course.

CMSC624 **Database System Architecture and Implementation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CMSC424; or students who have taken courses with comparable content may contact the department. Credit only granted for: CMSC624 or CMSC828N. Formerly: CMSC828N.

In-depth overview of database architectures--both the mainstream traditional architecture and more modern architectures that are especially prevalent in cloud implementations. Topics include different architectural choices for different application spaces and the tradeoffs inherent in choices and building different parts of database systems.

0101	Daniel Abadi	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	ONLINE

CMSC631 **Program Analysis and Understanding**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: CMSC330; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Techniques for static analysis of source code and modern programming paradigms. Analysis techniques: data flow analysis, program dependence graphs, program slicing, abstract interpretation. The meaning of programs: denotational semantics, partial evaluation. Advanced treatment of abstraction mechanisms: polymorphic types, operation overloading, inheritance, object-oriented programming and ML-like programming languages.

0101	Leonidas Lampropoulos	Seats (Total: 50)
	TuTh 2:00pm - 3:15pm	ONLINE

CMSC634 **Empirical Research Methods for Computer Science**

Credits: 3 Grading Method: Regular, Audit

Recommended: An introductory statistics class. Restriction: Must be in Computer Science (Master's) program; or must be in Computer Science (Doctoral) program; or permission of instructor. Credit only granted for: CMSC838G (Fall2005) or CMSC634.

A graduate-level introductory course on empirical reseach methods for computer scientists. Experimental techniques for evaluating software systems and processes, human performance using interfaces, programming environments, and software engineering methods. Introduction to constructs and methods of measurements, qualitative and quantitative design, quasi-experimental and non-experimental design, baseline design, and statistical analysis.

0101	Michelle Mazurek	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

CMSC657 **Introduction to Quantum Information Processing**

Credits: 3 Grading Method: Regular

Prerequisite: Familiarity with complex numbers and basic concepts in linear algebra (e.g. Credit only granted for: CMSC657 or CMSC858K. Formerly: CMSC858K. Additional information: Previous background in quantum mechanics or theory of computation is not required.

An introduction to the field of quantum information processing. Students will be prepared to pursue further study in quantum computing, quantum information theory, and related areas.

0101	Gorjan Alagic	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	ONLINE

CMSC660 **Scientific Computing I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have knowledge of C or Fortran. And CMSC466, AMSC466, AMSC460, or CMSC460; or (must have knowledge of basic numerical analysis (linear equations, nonlinear equations, integration, interpolation); and permission of instructor). Cross-listed with AMSC66 0. Credit only granted for: AMSC660 or CMSC660.

Monte Carlo simulation, numerical linear algebra, nonlinear systems and continuation method, optimization, ordinary differential equations. Fundamental techniques in scientific computation with an introduction to the theory and software for each topic.

0101	Tobias von Petersdorff	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

CMSC663 **Advanced Scientific Computing I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: AMSC660 or CMSC660; and (AMSC661 or CMSC661). Restriction: Permission of instructor. Cross-listed with AMSC663. Credit only granted for: AMSC663 or CMSC663.

In the sequence Advanced Scientific Computing I & Advanced Scientific Computing II, (AMSC663/CMSC663 and AMSC664/CMSC664, respectively) students work on a year-long individual project to develop software for a scientific task in a high performance computing environment. Lectures will be given on available computational environments, code development, implementation of parallel algorithms.

0101	Maria Cameron	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

CMSC666 **Numerical Analysis I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CMSC466 or AMSC466; and MATH410. Cross-listed with: AMSC666. Credit only granted for: AMSC666 or CMSC666.

Approximation theory, numerical solution of initial-value problems, iterative methods for linear systems, optimization.

Click here for more course information.

0101	Eitan Tadmor	Seats (Total: 27)
	TuTh 2:00pm - 3:15pm	ONLINE

CMSC727 **Neural Modeling**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CMSC421; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Fundamental methods of neural modeling. Surveys historical development and recent research results from both the computational and dynamical systems perspective. Logical neurons, perceptrons, linear adaptive networks, attractor neural networks, competitive activation methods, error back-propagation, self-organizing maps, and related topics. Applications in artificial intelligence, cognitive science, and neuroscience.

0101	James Reggia	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	ONLINE

CMSC734 **Information Visualization**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: CMSC434; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Information visualization defined in relation to graphics, scientific visualization, databases, data mining, and human-computer interaction. Visualizations for dimensional, temporal, hierarchical and network data. Examines design alternatives, algorithms and data structures, coordinated views, and human factors evaluations of efficacy.

0101	Zhicheng Liu	Seats (Total: 45)
	TuTh 9:30am - 10:45am	ONLINE

CMSC798 **Master's Non-Thesis Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

CMSC798P **Master's Non-Thesis Research; Machine Learning Capstone**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

0101	Thomas Goldstein	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

CMSC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

CMSC801 **Department Internal Research Seminar**

Credits: 1 Grading Method: Regular

Credit only granted for: CMSC798E or CMSC801. Formerly: CMSC798E.

Research overviews from faculty to help introduce departmental research to graduate students.

0101	Ramani Duraiswami	Seats (Total: 60)
	F 11:00am - 11:50am	ONLINE

CMSC818B **Advanced Topics in Computer Systems; Decision-Making for Robotics**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

Restricted to Computer Science students (CMSC) or permissin of instructor.

0101	Pratap Tokekar	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	ONLINE

CMSC818E **Advanced Topics in Computer Systems; Clouds, Consistency, & Consensus**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

0101	Peter Keleher	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ONLINE

CMSC818F **Advanced Topics in Computer Systems; Applied Cryptography and Hostile Governments Seminar**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

Prerequisite: CMSC414 or CMSC456. Restriction: CMSC MS or PhD students. Practical applications of cryptography that protect against those threats, such as secure messaging, anonymous communication, cryptocurrency/blockchain, and device encryption. Course project and paper discussions on topics including private information retrieval, blind signatures, cryptocurrency/blockchains, zero-knowledge proofs and zkSNARKs, mixnets,and multi-party computation.

0101	Ian Miers	Seats (Total: 30)
	MW 3:30pm - 4:45pm	ONLINE

CMSC818K **Advanced Topics in Computer Systems; Coding Theory and Applications**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

Cross-listed with ENEE729A. Credit only granted for CMSC818K or ENEE729A. Restricted MS/PhD students in CMSC, AMSC, or ENEE. Introduction to Coding Theory with an emphasis on essential constructions and algorithms.

0101	Alexander Barg	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

CMSC818W **Advanced Topics in Computer Systems; Wireless and Mobile Systems for the IoT**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

0101	Nirupam Roy MW 2:00pm - 3:15pm	Seats (Total: 45) ONLINE

CMSC818X **Advanced Topics in Computer Systems; Introduction to Parallel Computing**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

Prerequisite: CMSC411 and CMSC412 or permission of instructor. Restricted to CMSC students (MS or PhD). Introduction to parallel computing for computer science majors. Topics include programming for shared memory and distributed memory parallel architectures, and fundamental issues in design, development and analysis of parallel programs.

0101	Abhinav Bhatele TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE

CMSC828C **Advanced Topics in Information Processing; Statistical Pattern Recognition**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Behtash Babadi MW 11:00am - 12:15pm	Seats (Total: 90) ONLINE

CMSC828I **Advanced Topics in Information Processing; Advanced Techniques in Visual Learning and Recognition**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

Prerequisite: CMSC422, CMSC426, or equivalent; or permission of instructor.

0101	Abhinav Shrivastava TuTh 12:30pm - 1:45pm	Seats (Total: 85) ONLINE

CMSC828J **Advanced Topics in Information Processing; Common-sense Reasoning and Natural Language Understanding**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Rachel Rudinger	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ONLINE

CMSC828U **Advanced Topics in Information Processing; Algorithms in Machine Learning: Guarantees and Analyses**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Furong Huang	Seats (Total: 88)
	TuTh 3:30pm - 4:45pm	ONLINE

CMSC828V **Advanced Topics in Information Processing; Numerical Methods for Data Science and Machine Learning**

Credits: 1-3

Grading Method: Regular, Audit, Sat-Fail

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Maria Cameron	Seats (Total: 7)
	TuTh 9:30am - 10:45am	ONLINE

CMSC828W **Advanced Topics in Information Processing; Foundations of Deep Learning**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

Restricted to Computer Science (Master's/Doctoral) students; or permission of instructor.

0101	Soheil Feizi	Seats (Total: 100)
	TuTh 11:00am - 12:15pm	ONLINE

CMSC838J **Advanced Topics in Programming Languages; Interactive Technologies in Human-Computer Interaction**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by faculty from the literature of programming languages to suit the interest and background of students.

0101	Huaishu Peng	Seats (Total: 40)
	MW 3:30pm - 4:45pm	ONLINE

CMSC838X **Advanced Topics in Programming Languages; Personal Health Informatics & Visualization**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by faculty from the literature of programming languages to suit the interest and background of students.

Jointly offered with INST682. Credit only granted for INST682 or CMSC838 X.

IM01	Eun Kyoung Choe	Seats (Total: 40)
	Tu 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE

CMSC858D **Advanced Topics in Theory of Computing; Algorithms, Data Structures and Inference fo High-Throughput Genomics**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of theory of computing to suit the interest and background of students.

0101	Robert Patro	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

CMSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Advanced topics selected by the faculty from the literature of applications of computer science to suit the interest and background of students.

Contact department for information to register for this course.

CMSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

COMM Communication Fall 2020

COMM107 **Oral Communication: Principles and Practices**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285.

A study of and practice in oral communication, including principles of interviewing, group discussion, listening, informative briefings, and persuasive speeches.

Attendance on the first day of classes is mandatory.

0101	Julie Gowin MWF 8:00am - 8:50am	Seats (Total: 19) ESJ 1224
0201	Max Erdemandi MWF 8:00am - 8:50am	Seats (Total: 19) ONLINE
0301	Umisha Kc MWF 8:00am - 8:50am	Seats (Total: 19) ONLINE
1001	Aaron Swanlek MWF 8:00am - 8:50am	Seats (Total: 19) ONLINE
1101	Jim Golden MWF 9:00am - 9:50am	Seats (Total: 19) SYM 0200
1201	Max Erdemandi MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
1301	Umisha Kc MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
2201	Aaron Swanlek MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
2301	Tong Lin MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE

2401	Shelby Sturm MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
2501	Daniel Foster MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
2701	Jeannette Iannacone MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
2801	Jiawen Zhang MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
2901	Jeremy Grossman MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
3301	Tong Lin MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
3401	Shelby Sturm MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
3501	Ari Perez Montes MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
3601	Daniel Foster MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
3701	Jeannette Iannacone MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
3801	Jiawen Zhang MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
3901	Kalin Schultz MWF 11:00am - 11:50am	Seats (Total: 19) CSI 1122
4001	Aaron Swanlek MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
4101	Jeremy Grossman MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE

4201	Jeannette Iannacone MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
4301	Jeremy Grossman MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
4401	Lingyan Ma MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
4501	Delight Agboada MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
4601	Daniel Foster MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
4701	Kalin Schultz MWF 1:00pm - 1:50pm	Seats (Total: 19) ESJ 2208
4801	Victoria McDermott MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
4901	Jeremy Grossman MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
5001	Lingyan Ma MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
5101	Delight Agboada MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
5201	Daniel Foster MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
5401	Victoria McDermott MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
5501	Aaron Swanlek MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
5601	Duli Shi MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE

5701	Jim Golden MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
5801	Hagar Attia MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
5901	Raphael Mazzone MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
6001	Jade Olson MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
6101	Duli Shi MW 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
6201	Victoria Ledford MW 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
6301	Jim Golden MW 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
6401	Gerry Strumpf MW 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
6601	Tori Mends-Cole MW 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
6701	Jim Golden MW 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
6801	Paula Nadler MW 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
7101	Tori Mends-Cole MW 6:30pm - 7:45pm	Seats (Total: 19) ONLINE
7301	Christopher Swift TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
7401	Carolyn Robbins TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE

7901	Cassondra Pope TuTh 8:00am - 9:15am	Seats (Total: 19) ASY 2309
8001	Alex Thomas MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
8101	Christopher Swift TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
8201	Carolyn Robbins TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
8301	Jaclyn Bruner TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
8401	Jonathan Leach TuTh 9:30am - 10:45am	Seats (Total: 19) SQH 1120
8601	Janna Soeder TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
8701	Anne Smithson TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
8901	Jonathan Leach TuTh 11:00am - 12:15pm	Seats (Total: 19) SYM 0200
9001	Darrian Carroll TuTh 11:00am - 12:15pm	Seats (Total: 19) PLS 1140
9101	Divine Aboagye TuTh 11:00am - 12:15pm	Seats (Total: 19) ASY 2309
9201	Anne Smithson TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
9301	Jaclyn Bruner TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
9401	Sabeen Sheikh TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE

9501	Christopher Swift TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
9601	Jonathan Leach TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1140
9701	Karen Lamb TuTh 12:30pm - 1:45pm	Seats (Total: 19) BPS 1250
9801	Divine Aboagye TuTh 12:30pm - 1:45pm	Seats (Total: 19) ASY 2309
9901	Ashley Aragon TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
9902	Aaron Swanlek TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
9903	Randall Fowler TuTh 12:30pm - 1:45pm	Seats (Total: 19) SYM 0200
9904	Anne Smithson TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
9905	Darrian Carroll TuTh 2:00pm - 3:15pm	Seats (Total: 19) ESJ 1309
9906	Karen Lamb TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1140
9907	Taylor Hourigan TuTh 2:00pm - 3:15pm	Seats (Total: 19) BPS 1243
9908	Matthew Salzano TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
9909	Sarah Aghazadeh TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
9910	L Gordon TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE

9911	Karen Lamb TuTh 3:30pm - 4:45pm	Seats (Total: 19) ESJ 1309
9912	Allison Chatham TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
9913	Taylor Hourigan TuTh 3:30pm - 4:45pm	Seats (Total: 19) BPS 1243
9914	Janna Soeder TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
9915	Sarah Aghazadeh TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
9916	Jaclyn Bruner TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
9917	L Gordon TuTh 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
9918	Allison Chatham TuTh 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
9919	Shawna Dias TuTh 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
9920	Karen Lamb TuTh 5:00pm - 6:15pm	Seats (Total: 19) ESJ 1224
9923	L Gordon TuTh 6:30pm - 7:45pm	Seats (Total: 19) ONLINE
9924	Cassondra Pope TuTh 6:30pm - 7:45pm	Seats (Total: 19) PLS 1140
9925	Ashley Aragon TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
9926	Christopher Swift TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE

9927	Sabeen Sheikh TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
FC01	Thomas McCloskey MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ESJ 1224
FC02	Cassondra Pope TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ESJ 2208
FC03	Sue Sherburne TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) SYM 0200
FC04	Jade Olson MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC05	Soyoung Bae MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC09	Mollie Kaufer TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE

COMM107B **Oral Communication: Principles and Practices**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285.

A study of and practice in oral communication, including principles of interviewing, group discussion, listening, informative briefings, and persuasive speeches.

This class is designed for current or prospective Business Majors.

0101	Melissa Lucas TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE

0201	Christine Schaaf TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 19) ESJ 1215 ONLINE

COMM107C **Oral Communication: Principles and Practices**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285.

A study of and practice in oral communication, including principles of interviewing, group discussion, listening, informative briefings, and persuasive speeches.

This class is designed for current or prospective STEM students.

0201	Cassondra Pope TuTh 9:30am - 10:45am	Seats (Total: 19) ASY 2309

COMM107D **Oral Communication: Principles and Practices**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285.

A study of and practice in oral communication, including principles of interviewing, group discussion, listening, informative briefings, and persuasive speeches.

This class is designed for students committed to community engagement and social change. Guided by a model of service learning, students will work alongside the Do Good Institute to enact change in their communities.

0201	Ashley Aragon TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE

COMM130 **Professional Communication and Writing**

Credits: 1 Grading Method: Regular

Restriction: Must be in the Communication major.

Designed to enhance the clarity and grace of students' writing. Students will acquire knowledge of writing based on principles of style and grammar as well as argument and organizational structure across a diversity of professional writing contexts. Students will also engage in peer review of one another's writing.

0101	Shawn Parry-Giles Class time/details on ELMs	Seats (Total: 120) ONLINE

COMM200 **Critical Thinking and Speaking**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130, OR THET285.

Theory and practice of persuasive discourse analysis and composition. Research techniques, logical and rhetorical conceptions of argument, and technical principles for persuading in public venues.

Attendance on the first day of classes is mandatory.

0101	Aya Farhat TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
0201	Randall Fowler TuTh 8:00am - 9:15am	Seats (Total: 19) HJP 0226
0301	Randall Fowler TuTh 9:30am - 10:45am	Seats (Total: 19) HJP 0226
0401	Aya Farhat TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE

COMM201 **Introduction to Public Relations**

Credits: 3 | Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in COMM130. Restriction: Must be in the Communication major.

Basic concepts and principles of public relations. Roles in organizations and society; history; skills and practices of public relations; theories and models of effective and ethical public relations.

Restricted to COMM majors (1506A) only.

0101	Sun Young Lee MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

0102	Sun Young Lee MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0103	Sun Young Lee MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0104	Sun Young Lee MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0105	Sun Young Lee MW 2:00pm - 2:50pm F 3:00pm - 3:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0106	Sun Young Lee MW 2:00pm - 2:50pm F 3:00pm - 3:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion

COMM230 **Argumentation and Debate**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A study of the fundamental principles of reasoning, analysis, and evidence preparation of debate briefs and presentation of standard academic debate.

Attendance on the first day of class is mandatory.

0101	Misti Yang TuTh 8:00am - 9:15am	Seats (Total: 24) ONLINE	
0201	Misti Yang TuTh 9:30am - 10:45am	Seats (Total: 24) ONLINE	
0301	Fielding Montgomery TuTh 11:00am - 12:15pm	Seats (Total: 24) ONLINE	
0401	Fielding Montgomery TuTh 12:30pm - 1:45pm	Seats (Total: 24) ONLINE	

COMM250 Introduction to Communication Inquiry

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An introduction to the field of communication. Definitions, models, and contexts of communication; rhetorical theory and rhetorical criticism of discourse.

0101	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 23) ONLINE ONLINE ONLINE	 Discussion
0102	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 23) ONLINE ONLINE ONLINE	 Discussion
0103	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 23) ONLINE ONLINE ONLINE	 Discussion
0104	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 23) ONLINE ONLINE ONLINE	 Discussion
0105	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 23) ONLINE ONLINE ONLINE	 Discussion
0106	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 23) ONLINE ONLINE ONLINE	 Discussion
0107	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 23) ONLINE ONLINE ONLINE	 Discussion

0108	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 23) ONLINE ONLINE ONLINE	 Discussion
0109	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 23) ONLINE ONLINE ONLINE	 Discussion

COMM269B **Special Topics in Study Abroad II; Oral Communication for Leaders in the Business World**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM269C **Special Topics in Study Abroad II; Designing Communication Campaigns**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM269M **Special Topics in Study Abroad II; Media Technology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM269P **Special Topics in Study Abroad II; Principles of Film and Media Production**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM269R **Special Topics in Study Abroad II; Introduction to Public Relations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM288 **Communication Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

An individual experience arranged by the student with the instructor. Does not satisfy communication major requirements. 45 hours of supervised internship per credit hour with communication professional. Not a substitute for COMM386.

0101	Julie Gowin Contact instructor or department for details.	Seats (Total: 20)
0601	Leah Waks Contact instructor or department for details.	Seats (Total: 20)

COMM298R **Selected Topics in Communication; Introduction to Public Relations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM304 **Communication Research Literacy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in COMM130; and COMM250; and one of STAT100, BMGT230, EDMS451, CCJS200, PSYC200, or SOCY201; and one of COMM107, COMM200 or COMM230. Restriction: Must be in the Communication program.

Explores the different research traditions in the Communication discipline. This "literacy" course will develop students' ability to locate and fully comprehend Communication research and to understand how that research is conducted, reported, analyzed, and critiqued in Communication literature.

0101	Trevor Parry-Giles TuTh 3:30pm - 4:45pm	Seats (Total: 120) ONLINE
ESG1	Soyoung Bae TuTh 11:00am - 12:15pm *Restricted to COMM majors at Shady Grove.*	Seats (Total: 40) ONLINE

COMM324 **Communication and Gender**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit , D | General Education: DSHU, DVUP

The creation of images of male and female, and masculine and feminine, through communication, the differences in male and female communication behaviors and styles, and the implications of those images and styles for male-female transactions.

0101	Alex Thomas MW 3:30pm - 4:45pm	Seats (Total: 35) ONLINE
0201	Alex Thomas MW 5:00pm - 6:15pm	Seats (Total: 35) ONLINE
0301	Elizabeth Phipps TuTh 8:00am - 9:15am	Seats (Total: 35) ONLINE
0401	Elizabeth Phipps TuTh 9:30am - 10:45am	Seats (Total: 35) ONLINE
0501	Janna Soeder TuTh 11:00am - 12:15pm	Seats (Total: 35) ONLINE

COMM330 **Argumentation and Public Policy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Contemporary theories of argumentation with special emphasis on methods of formulating and critiquing public policy argument.

0101	Victoria Ledford MW 2:00pm - 3:15pm	Seats (Total: 35) ONLINE
0201	Jaclyn Bruner TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE
ESG1	Jade Olson TuTh 9:30am - 10:45am *Restricted to COMM majors at Shady Grove.*	Seats (Total: 40) ONLINE

COMM331 **News Writing and Reporting for Public Relations**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM201; and must have completed or be concurrently enrolled in JOUR181. Restriction: Must be in Communication program; and (sophomore standing; or junior standing). Or permission of ARHU-Communication department. Credit only granted for: JOUR201, COMM231, or COMM331. Formerly: COMM231.

Writing and researching news and information media for public relations; laboratory in news-gathering tools and writing techniques for public relations.

0101	Susan Simon	Seats (Total: 18)	
	M 11:00am - 12:50pm	ESJ 1309	
	W 11:00am - 12:50pm	ESJ 1309	Lab

COMM332 **News Editing for Public Relations**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in COMM331; or students who have taken courses with comparable content may contact the department. And permission of ARHU-Communication department. Restriction: Must be in Communication program. Credit only granted for: JOUR202, COMM232, or COMM332. Formerly: COMM232.

Copy editing, graphic principles and processes, news and information technologies for public relations.

0101	Vijaya Bohlmann	Seats (Total: 18)	
	Tu 8:00am - 9:15am	ONLINE	
	Th 8:00am - 9:15am	ONLINE	Lab
0201	Vijaya Bohlmann	Seats (Total: 18)	
	Tu 9:30am - 10:45am	ONLINE	
	Th 9:30am - 10:45am	ONLINE	Lab
0301	Steven Drake	Seats (Total: 18)	
	Tu 5:00pm - 6:15pm	ONLINE	
	Th 5:00pm - 6:15pm	ONLINE	Lab
0501	Sarah Aghazadeh	Seats (Total: 18)	
	Tu 11:00am - 12:15pm	ONLINE	
	Th 11:00am - 12:15pm	ONLINE	Lab

COMM351 **Public Relations Techniques**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM332. Restriction: Must be in Communication program. Credit only granted for: COMM351 or JOUR331. Formerly: JOUR331.

The techniques of public relations, including news releases, publications and printed materials, audio-visual techniques, speeches and special events. Application of these techniques in laboratory and field projects.

0101	Gareth Williams	Seats (Total: 18)	
	M 1:00pm - 2:15pm	ESJ 1224	
	W 1:00pm - 2:15pm	ESJ 1224	Lab
0201	Steven Drake	Seats (Total: 18)	
	M 2:30pm - 3:45pm	ONLINE	
	W 2:30pm - 3:45pm	ONLINE	Lab

COMM353 **New Media Writing for Public Relations**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in COMM351. Restriction: Must be in Communication program. Credit only granted for: COMM352 or COMM353. Formerly: COMM352.

Students learn the uses and influence of new media on public relations practice and expand their ability to write using new and traditional media platforms and tools

0101	Shawna Dias	Seats (Total: 18)	
	Tu 2:00pm - 3:15pm	ONLINE	
	Th 2:00pm - 3:15pm	ONLINE	Lab

COMM360 **The Rhetoric of Black America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

An historical-critical survey of the rhetoric of Black Americans from the colonial period to the present.

0101	Darrian Carroll	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ESJ 0224

COMM370 **Mediated Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Junior standing or higher.

Analysis and critique of structure, performance, content, effects, and future of mediated communication.

0101	Catherine Steele TuTh 11:00am - 12:15pm	Seats (Total: 35) ONLINE
ESG1	Soyoung Bae TuTh 2:00pm - 3:15pm *Restricted to COMM majors at Shady Grove.*	Seats (Total: 40) ONLINE

COMM371 Communication and Digital Media

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Communication program.

A basic introduction to communication in the digital age. Through class lectures, assignments and projects, students will learn to effectively use new media for the purpose of strategic message creation and management used in the field of communication. Students will apply the basics of visual layout skills and the principles of visual design to create messages using words and images.

ESG1	Jaclyn Bruner, Robert Coleman Class time/details on ELMs *Restricted to COMM majors at Shady Grove.*	Seats (Total: 25) ONLINE

COMM372 Communication, Meaning, and Digital Media

Credits: 3 Grading Method: Regular

Restriction: Must be in Communication program.

An exploration of visual communication and meaning creation. A theoretical and practical application of communication concepts and techniques in the production of visual content.

Formerly COMM498J. Credit granted for COMM498J or COMM372.

ESG1	Adam Nixon M 4:30pm - 7:00pm *Restricted to COMM majors at Shady Grove.*	Seats (Total: 25) BLD4 1201

COMM373 **Communication and Digital Visual Narrative**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Communication program.

Examination of the traditional style of visual communication, its practices and theoretical underpinnings juxtaposed against contemporary digital media aesthetics and techniques. Utilizing a variety of communication skills and new media tools, students will plan, write, shoot, edit, and upload digital visual narratives.

Formerly COMM498K. Credit granted for COMM498K or COMM373.

ESG1	Adam Nixon Tu 4:30pm - 7:00pm *Restricted to COMM majors at Shady Grove.*	Seats (Total: 25) BLD4 1201

COMM375 **Documentary Theory and Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Communication program.

A historical and theoretical introduction to documentary films and videos. Students will explore the power of documentaries to address socially significant issues.

ESG1	Adam Nixon W 4:30pm - 7:00pm *Restricted to COMM majors at Shady Grove.*	Seats (Total: 25) BLD4 1201

COMM382 **Essentials of Intercultural Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DVCC

Credit only granted for: COMM382 or COMM482.

Introduction of major theories and concepts of intercultural communication; examination of processes that make up cultural differences; and use of intercultural communication competence skills.

0101	Anita Seate MW 3:30pm - 4:45pm	Seats (Total: 35) ONLINE
0201	Nick Joyce TuTh 3:30pm - 4:45pm	Seats (Total: 35) ONLINE

0301	Nick Joyce TuTh 5:00pm - 6:15pm	Seats (Total: 35) ONLINE
ESG1	David Payne Class time/details on ELMs *Restricted to COMM majors at Shady Grove.*	Seats (Total: 40) ONLINE

COMM386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail General Education: DSSP

Prerequisite: Permission of ARHU-Communication department. Restriction: Junior standing or higher; and must be in Communication program.

Supervised internship experience with communication professionals. Relation of academic training to professional experience.

0101	Julie Gowin Contact instructor or department for details.	Seats (Total: 75)
ESG1	Raimonda Nuredini Class time/details on ELMs *Restricted to COMM majors at Shady Grove.*	Seats (Total: 20) ONLINE

COMM388 **Communication Practicum**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Supervised professional-level practice in communication.

Contact department for information to register for this course.

COMM398 **Selected Topics in Communication**

(Perm req)

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM398E **Selected Topics in Communication; Health Communication**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Restricted to COMM (1506A) majors only.

0101	Kang Namkoong MW 3:30pm - 4:45pm	Seats (Total: 35) ONLINE

COMM398F **Selected Topics in Communication; Web Graphics, Coding, and Site Design**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM398G **Selected Topics in Communication; Media Theory**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Restricted to COMM majors only. Prerequisites: Must have completed COMM250, one of the following: STAT100, BMGT230, EDMS451, CCJS200, PSYC200, or SOCY201; and one of the following: COMM107, COMM200, or COMM230. Corequisite: Must be concurrently enrolled in COMM130. This course provides students with an introduction to media theory from multiple perspectives. We will begin by understanding how the history of mediated communication has been connected to ideology and lived experiences. Through readings, discussions, and activities, you will understand how technical, historical, economic, social, and political forces have helped shape media content and the media themselves. You should also become familiar with the debate over how much influence the media have over their audiences, and what types of influences are present. The course will introduce issues relevant to consideration of media and historically underrepresented and marginalized groups, as well as individual and societal functions of the media.

0101	Catherine Steele TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE

COMM398K **Selected Topics in Communication; Communication and Strategic Message Design**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

ESG1	Robert Coleman, Ilse Genovese, Leah Waks, Adam Nixon Class time/details on ELMs *Restricted to COMM majors at Shady Grove.*	Seats (Total: 25) ONLINE

COMM398L **Selected Topics in Communication; Science, Media, and the Public**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

This course is designed to introduce the interrelationship among science , media, and society. We will address current thinking about how do mass media shape the nature of public debates about science, where do people go for information about science, and how public understand science. Upon successful completion of this course, students will be able to specify the roles of knowledge, expertise, risk, media, public understanding and discourse play in perceptions of science and policy making.

0101	Ji Youn Kim TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE

COMM398N **Selected Topics in Communication; Communication and Digital Imaging**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

ESG1	Adam Nixon, Ilse Genovese, Robert Coleman, Leah Waks Class time/details on ELMs *Restricted to COMM majors at Shady Grove.*	Seats (Total: 25) ONLINE

COMM398Q **Selected Topics in Communication; Social Media Analytics**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

ESG1	Adam Nixon Th 4:30pm - 7:00pm *Restricted to COMM majors at Shady Grove.*	Seats (Total: 40) ONLINE

COMM398Z **Selected Topics in Communication; Media Ethics and Cultural Citizenship**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM399 **Honors Thesis**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0601	Leah Waks Contact instructor or department for details.	Seats (Total: 10)
1001	Andrew Wolvin Contact instructor or department for details.	Seats (Total: 5)
3801	Dale Hample Contact instructor or department for details.	Seats (Total: 10)
4001	Xiaoli Nan Contact instructor or department for details.	Seats (Total: 10)
4601	Michelle Yang Contact instructor or department for details.	Seats (Total: 5)
4801	Nick Joyce Contact instructor or department for details.	Seats (Total: 5)
4901	Lindsey Anderson Contact instructor or department for details.	Seats (Total: 5)
5301	Kang Namkoong Contact instructor or department for details.	Seats (Total: 5)
5501	Catherine Steele Contact instructor or department for details.	Seats (Total: 5)

COMM400 **Research Methods in Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM250; and must have an introductory course in statistics. Restriction: Must be in Communication program. Credit only granted for: COMM400 or COMM307.

Philosophy of scientific method; role of theory; research ethics; empirical research methods (measurement, sampling, design, analysis).

Attendance on the first day of class is mandatory.

0101	Xiaoli Nan TuTh 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

0102	Xiaoli Nan TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	Discussion
0103	Xiaoli Nan TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	Discussion
0104	Xiaoli Nan TuTh 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	Discussion
0105	Xiaoli Nan TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	Discussion
0106	Xiaoli Nan TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	Discussion

COMM401 **Interpreting Strategic Discourse**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Must be in Communication program.

Principles and approaches for practical analysis of discourse designed to shape audience opinion.

Attendance on the first day of classes is mandatory.

0101	Damien Pfister TuTh 12:30pm - 1:20pm W 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	Discussion
0102	Damien Pfister TuTh 12:30pm - 1:20pm W 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	Discussion
0103	Damien Pfister TuTh 12:30pm - 1:20pm W 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	Discussion

0104	Damien Pfister TuTh 12:30pm - 1:20pm W 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0105	Damien Pfister TuTh 12:30pm - 1:20pm W 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	Damien Pfister TuTh 12:30pm - 1:20pm W 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0201	Janna Soeder TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE	
ESG1	Jade Olson TuTh 11:00am - 12:15pm *Restricted to COMM majors at Shady Grove.*	Seats (Total: 40) ONLINE	

COMM402 **Communication Theory and Process**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Must be in Communication program.

Philosophical and conceptual analysis of communication theories.

Attendance on the first day of classes is mandatory.

0101	Kang Namkoong MW 12:00pm - 12:50pm M 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Kang Namkoong MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Kang Namkoong MW 12:00pm - 12:50pm M 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

0105	Kang Namkoong MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	Kang Namkoong MW 12:00pm - 12:50pm M 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
ESG1	Soyoung Bae TuTh 12:30pm - 1:45pm *Restricted to COMM majors at Shady Grove.*	Seats (Total: 40) ONLINE	

COMM420 **Theories of Group Discussion**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Current theory, research and techniques regarding small group process, group dynamics, leadership and decision-making.

ESG1	David Payne Class time/details on ELMs *Restricted to COMM majors at Shady Grove.*	Seats (Total: 40) ONLINE	

COMM422 **Communication Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Communication policies, plans, channels, and practices in the management of the communication function in organizations.

0101	Andrew Wolvin TuTh 11:00am - 12:15pm	Seats (Total: 35) ONLINE	

COMM424 **Communication in Complex Organizations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Structure and function of communication within organizations: organizational climate and culture, information flow, networks and role relationships.

0101	Raphael Mazzone MW 5:00pm - 6:15pm	Seats (Total: 35) ONLINE

COMM425 **Negotiation and Conflict Management**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Role of communication in shaping negotiation and conflict processes and outcomes.

Restricted to COMM majors only. The class will only meet on campus every other Thursday (dates: 9/10, 9/24, 10/8, 10/22, 11/5, 11/19, and 12/3) the rest will be online.

0101	Lauren Edelstein Th 11:00am - 12:15pm Tu 11:00am - 12:15pm	Seats (Total: 45) ESJ 0224 ONLINE

COMM426 **Conflict Management**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Recommended: COMM425 and COMM250.

Role of communication in managing conflict processes.

This course is restricted to COMM majors only.

0101	Lauren Edelstein TuTh 9:30am - 10:45am	Seats (Total: 45) ONLINE

COMM427 **Crisis Communication**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Explores theories and research related to communication before, during, and after a crisis. Students examine the fundamentals of organizational communication, crisis management, and strategic and crisis communication planning before examining case studies of a number of real-life crises: organizational crises, natural disasters, accidents, terrorism incidents, health crises, and major crises of credibility.

0101	Brooke Liu TuTh 3:30pm - 4:45pm	Seats (Total: 35) ONLINE

COMM435 **Theories of Interpersonal Communication**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM400; or permission of ARHU-Communication department.

Major theoretical approaches and research trends in the study of interpersonal communication.

0101	Dale Hample	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	ONLINE

COMM436 **Interpersonal Arguing**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM400 and COMM250. Restriction: Must be in Communication program. Credit only granted for: COMM436 or COMM498I. Formerly: COMM498I.

An examination of face to face arguing.

0101	Dale Hample	Seats (Total: 35)
	TuTh 5:00pm - 6:15pm	ONLINE

COMM460 **Public Life in American Communities, 1634-1900**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Ways that Americans have used their voice to create public life. Focus is on the diverse social communities that have characterized American life and the place and characteristics of oral discourse in each.

0101	Carly Woods	Seats (Total: 35)
	MW 2:00pm - 3:15pm	ONLINE

COMM468A **Seminar in Mediated Communication; Arab Media**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The examination of special topics related to the study of mediated communication.

COMM468A introduces students to media systems in the Arab world. The course reviews the historical development and contemporary status of Arab media. In doing so, it compares and contrasts the similarities and differences between different media systems in the Arab region and explores the various political, economic, and social factors impacting their most recent changes, as well as the various challenges confronting them. The course also explores the impact of the new communication revolution, such as the introduction of satellite television and the Internet and the use of social media, on the media scene in the Arab world.

0101	Sahar Khamis	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	ONLINE

COMM468M **Seminar in Mediated Communication; Mediated Global Communication in the Digital Age**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The examination of special topics related to the study of mediated communication.

Restricted to COMM majors only. This course explores the role of new media, especially internet-enabled forms of digital communication, in fostering effective global communication, through spreading awareness, knowledge, and dialogue, as well as fighting misconceptions and stereotypes. It sheds light on some of the obstacles that may hinder effective global communication, and how they can be best addressed, and the multiple roles which new media can play in overcoming such obstacles. The course provides the students with both theoretical grounding, as well as practical training, to better equip them to grasp the complexities of global communication in the digital age, its various dimensions, numerous applications, and multiple implications.

0101	Sahar Khamis	Seats (Total: 35)
	TuTh 5:00pm - 6:15pm	ONLINE

COMM468T **Seminar in Mediated Communication; Technology and Digital Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The examination of special topics related to the study of mediated communication.

This seminar will explore themes related to the transition from a mass media ecology to a networked media ecology, with special attention to the role of technological change. Readings will span early 20th century theories of mass communication to contemporary theories of digitally networked communication. The course will be of special interest to students interested in the history of media technology, digital culture, and emerging technologies.

0101	Damien Pfister	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ONLINE

COMM469G **The Discourse of Social Movements; Rhetoric of Gender Activism**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Study of key social movements that have influenced American social and political life. In alternate years the Civil Rights Movement and the Rhetoric of Women's Suffrage and Abolitionism. Consideration of how groups excluded from or marginalized in American political life affect social change.

0101	Melissa Lucas	Seats (Total: 35)
	MW 3:30pm - 4:45pm	ONLINE

COMM469O **The Discourse of Social Movements; Rhetoric of Oppressed Peoples**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Study of key social movements that have influenced American social and political life. In alternate years the Civil Rights Movement and the Rhetoric of Women's Suffrage and Abolitionism. Consideration of how groups excluded from or marginalized in American political life affect social change.

0101	Michelle Yang	Seats (Total: 35)
	MW 5:00pm - 6:15pm	ONLINE

COMM470 **Listening**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The principles of listening behavior.

This course is restricted to COMM majors only.

0101	Andrew Wolvin	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ONLINE

COMM475 **Persuasion**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Bases of persuasion, with emphasis on recent experimental developments in persuasion.

This course is restricted to COMM majors only.

0101	Susan Hubbard	Seats (Total: 45)
	MW 12:30pm - 1:45pm	ONLINE

COMM476 **Language, Communication, and Action**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Communication major.

Communication as symbolic action through the study of communication ethics. Emerging ethical principles and decision-making in public discourse, interpersonal communication, organizational communication, public relations, health communication, and crisis communication.

Retricted to COMM majors (1506A) only.

0101	Elizabeth Toth	Seats (Total: 35)
	MW 2:00pm - 3:15pm	ONLINE

COMM483 **Senior Seminar in Public Relations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM351 and COMM400. Credit only granted for: COMM483 or JOUR483. Formerly: JOUR483.

Integration of theory, techniques and research methods into the planning and execution of public relations campaigns for specific organizations. Analysis of research on the case studies of public relations.

0101	Elizabeth Toth	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

COMM488I **Communication Portfolio Project; Strategic Interviewing for the Career You Want**

Credits: 1 Grading Method: Regular

Preparation of the professional communication portfolio.

This course introduces students to advanced techniques in interviewing for job opportunities and career progression. This online course focuses on the dynamics of the interview process, the communication theories and best practices behind influence and persuasion, and the communication aptitudes and skills that distinguish top candidates.

0101	Gareth Williams	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

COMM489 **Topical Research**

(Perm req) Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Individualized research projects conducted with a faculty sponsor.

Contact department for information to register for this course.

COMM498M **Seminar; War and Peace in Israeli Discourse 1967-2020**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Present-day communication research.

Cross-listed with ISRL448M. Credit only granted for ISRL448M or COMM498M. This course examines two oppositional discourses in Israel: 1) war discourse, which utilizes various discursive strategies, such as metaphors, lexical choices, and euphemisms, to routinize war; 2) peace discourse, which utilizes conciliatory speech acts, equivocation in diplomatic discourse, recognition discourses, and separation and engagement discourses. We will explore how war and peace discourses impact social consciousnessin Israel.

0101	Elie Friedman	Seats (Total: 45)
	Class time/details on ELMs	ONLINE

COMM498V **Seminar; Visual Rhetoric**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Present-day communication research.

0101	Michelle Yang	Seats (Total: 35)
	MW 3:30pm - 4:45pm	ONLINE

COMM498X **Seminar; Writing for Communication Professionals**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Present-day communication research.

ESG1	Mollie Kaufer	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	Restricted to COMM majors at Shady Grove.	

COMM498Y **Seminar; Freedom of Speech & the First Amendment**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Present-day communication research.

This course examines the U.S. Supreme Court's rulings on freedom of speech cases grounded in the First Amendment.

0101	Anne Smithson	Seats (Total: 35)
	Class time/details on ELMs	ONLINE

COMM631 **Seminar in Public Relations Publics**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: COMM631 or JOUR631. Formerly: JOUR631.

Analysis of public relations programs aimed at organizational publics. Media, issue-related, community, employee, governmental, consumer, financial, and student/educator publics. Theories of the nature of publics, communication behavior of publics, and effects of public relations programs aimed at different publics.

0101	Sun Young Lee	Seats (Total: 15)
	M 3:30pm - 6:30pm	ONLINE

COMM659 **Translation for Language-Specific Markets**

Credits: 1-3

Grading Method: Regular, Audit

Builds translation skills to a highly professional level by developing autonomy in completing authentic, real-world translation projects based upon the reflective approach developed in the first-year curriculum. Develops one or more specializations. Completion of individual and group projects covering all aspects of professional translation from subject matter research, terminology work, and use of computer-assisted translation tools. Sight translation and timed exercises to increase production and meet deadlines.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Shawn Parry-Giles, Yana Carver	Seats (Total: 30)
	Contact instructor or department for details.	

COMM659G **Translation for Language-Specific Markets; Spanish into English/English into Spanish**

Credits: 1

Grading Method: Regular, Audit

Builds translation skills to a highly professional level by developing autonomy in completing authentic, real-world translation projects based upon the reflective approach developed in the first-year curriculum. Develops one or more specializations. Completion of individual and group projects covering all aspects of professional translation from subject matter research, terminology work, and use of computer-assisted translation tools. Sight translation and timed exercises to increase production and meet deadlines.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Eva Vilarrubi Tu 11:30am - 12:30pm Class time/details on ELMs *English into Spanish.*	Seats (Total: 16) SKN 3118 ONLINE	Discussion
XGS1	Joseph Mazza Tu 7:00pm - 8:50pm *Spanish into English. Class will meet on: 9/1, 9/15, 9/29, 10/13, 10/27, 11/10, 11/24, 12/8.*	Seats (Total: 16) ESJ 1309	

COMM669 **Professional Practice Forum in Translation: Practicum**

Credits: 1

Grading Method: Regular, Audit

Provides opportunities to complete real-world translation projects on campus and in the public service, legal, business, and political communities as translators, project managers and translators/reviewers working on group projects. Collaboration with participants in the interpreting practicum is also sought to prepare multilingual texts for practicum events and familiarize participants with conference translation. Complements Translation for Specific Markets, and practicum projects are included in course and career reflective practice portfolios. Requires independent study plan agreed with course instructor.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PDG1	Yana Carver, Shawn Parry-Giles W 11:00am - 12:15pm *Will meet on 09/09 and 10/28.*	Seats (Total: 30) ONLINE	

COMM679 **Professional Practice Forum in Translation: Workplace Processes and Procedures; Workplace Processing and Procedures Translation**

Credits: 1

Grading Method: Regular, Audit

Provides in-depth exploration of processes and procedures in public service, legal, and political settings requiring translation services. Prepares for translation in real-world settings by discussing procedures across sectors and institutions, enabling informed career plans and choices. Discusses ethics, professional conduct and business practices. Reinforces identity as a professional translator, develops specializations, and pursues professional and career development opportunities through interaction with members of the profession, professional organizations, and institutions in the language industry.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PDG1	Miriam Stanicic	Seats (Total: 30)
	Sa 8:30am - 10:30am	ONLINE
	Class dates are: 09/12; 09/26; 10/10; 10/24; 11/07; 11/21; 12/05.	

COMM686 **Teaching Communication**

Credits: 1

Grading Method: Regular, Audit

Formerly: SPCH686.

Principles of effective teaching--content and process--in the college communication classroom.

0101	Lindsey Anderson	Seats (Total: 30)
	W 12:00pm - 1:00pm Class time/details on ELMs	SKN 3118 ONLINE
	Alternating face-to-face/online class meeting. Please see instructor fo details.	

COMM688 **Communication Field Experience**

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

Applications of communication principles and research in professional communication settings.

Contact department for information to register for this course.

COMM698 **Special Problems in Communication**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Contact department for information to register for this course.

COMM698A **Special Problems in Communication; Science Communication**

Credits: 1-3

Grading Method: Regular, Audit

0101	Ji Youn Kim Th 3:30pm - 6:30pm	Seats (Total: 15) ONLINE

COMM700 **Introduction to Graduate Study in Communication**

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in Communication (Doctoral) program. Formerly: SPCH700.

Basic skills in communication research.

0101	Anita Seate M 6:30pm - 9:30pm	Seats (Total: 30) ONLINE

COMM711 **Historical/Critical Methods in Communication Research**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

Prerequisite: COMM700; or permission of instructor. Formerly: SPCH711.

Methods for historical and critical research in communication. Formulation of significant research questions, systematic collection of bibliographic and phenomenal information, formulating substantial claims, organizing and writing research for disciplinary outlets.

0101	Carly Woods M 3:30pm - 6:30pm	Seats (Total: 15) ONLINE

COMM715 **Advanced Qualitative Methods in Communication Research**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: COMM714; or students who have taken courses with comparable content may contact the department.

Advanced data analysis of qualitative data in Communication research. In-field research and techniques for analysis of data from in-field work.

0101	Lindsey Anderson W 3:30pm - 6:30pm Class time/details on ELMs	Seats (Total: 15) SKN 3118 ONLINE

COMM719 **Advanced Consecutive Interpretation**

Credits: 2-3 Grading Method: Regular, Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PDG1	Shawn Parry-Giles, Yana Carver Class time/details on ELMs *This section should be added if registering for only online COMM719 extension sections.*	Seats (Total: 30) ONLINE
PG01	Shawn Parry-Giles, Yana Carver Contact instructor or department for details. *This section should be added if registering for any Face-to-Face COMM719 extension sections.*	Seats (Total: 30)

COMM719A **Advanced Consecutive Interpretation; Arabic into English/English into Arabic**

Credits: 1 Grading Method: Regular, Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGA1	Ihab Ali Th 5:00pm - 6:15pm *Arabic into English.*	Seats (Total: 16) ONLINE
XGE1	Ihab Ali Th 6:30pm - 7:30pm *English into Arabic.*	Seats (Total: 16) ONLINE

COMM719C **Advanced Consecutive Interpretation; Advanced Consecutive Interpretation; French into English/English into French**

Credits: 1

Grading Method: Regular, Audit, Sat-Fail

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Pascale Kraus M 3:00pm - 4:15pm Class time/details on ELMs *English into French.*	Seats (Total: 16) SKN 3118 ONLINE	Discussion
XGF1	Pascale Kraus M 4:30pm - 5:30pm Class time/details on ELMs *French into English.*	Seats (Total: 16) SKN 3118 ONLINE	Discussion

COMM719F **Advanced Consecutive Interpretation; Advanced Consecutive Interpretation; Spanish into English/English into Spanish**

Credits: 1

Grading Method: Regular, Audit, Sat-Fail

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting. For permission to enroll, contact oes@umd.edu

XGE1	Rosalinda Meza-Steel Sa 11:00am - 12:15pm *English into Spanish.*	Seats (Total: 16) ONLINE	

XGS1	Rosalinda Meza-Steel Sa 12:30pm - 1:30pm *Spanish into English.*	Seats (Total: 16) ONLINE

COMM729 **Simultaneous Interpretation**

Credits: 2-3 Grading Method: Regular, Audit

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PDG1	Shawn Parry-Giles, Yana Carver Contact instructor or department for details. *This section should be added if registering for only online COMM729 extension sections.*	Seats (Total: 16)
PG01	Yana Carver, Shawn Parry-Giles Contact instructor or department for details. *This section should be added if registering for any Face-to-Face COMM729 extension sections.*	Seats (Total: 16)

COMM729A **Simultaneous Interpretation; Simultaneous Interpretation; English into Arabic/Arabic into English**

Credits: 1 Grading Method: Regular, Audit

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGA1	Ihab Ali Sa 11:00am - 12:15pm *Arabic into English.*	Seats (Total: 16) ONLINE	
XGE1	Ihab Ali Sa 12:30pm - 1:30pm *English into Arabic.*	Seats (Total: 16) ONLINE	

COMM729C **Simultaneous Interpretation; Simultaneous Interpretation; French into English/English into French**

Credits: 1

Grading Method: Regular, Audit, Sat-Fail

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Pascale Kraus W 3:00pm - 4:15pm Class time/details on ELMs *English into French.*	Seats (Total: 16) SKN 3118 ONLINE	 Discussion
XGF1	Pascale Kraus W 4:30pm - 5:30pm Class time/details on ELMs *French into English.*	Seats (Total: 16) SKN 3118 ONLINE	 Discussion

COMM729F **Simultaneous Interpretation; Simultaneous Interpretation; Spanish into English/English into Spanish**

Credits: 1

Grading Method: Regular, Audit, Sat-Fail

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Rosalinda Meza-Steel Sa 1:45pm - 2:45pm *English into Spanish.*	Seats (Total: 16) ONLINE
XGS1	Rosalinda Meza-Steel Sa 3:00pm - 4:15pm *Spanish into English.*	Seats (Total: 16) ONLINE

COMM738M **Seminar in Mediated Communication; Media & Politics in the Early 21st Century**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

The examination of special topics related to the study of mediated communication.

The study of the relationships between political communication in the United States and the mediation of that communication for varied public audiences. Particular attention to the evolving mediations of political discourse over the course of U.S. history with specific focus on campaign communication.

0101	Trevor Parry-Giles W 6:30pm - 9:30pm	Seats (Total: 15) ONLINE

COMM759 **Professional Practice Forum in Interpreting: Practicum**

Credits: 1 Grading Method: Regular, Audit

Provides opportunities to interpret consecutively and simultaneously in real-world settings on campus and in the public service, legal, business, and political communities. Develops team leader skills by organizing and convening an event or series of events (conference, debate, or negotiation), selecting topics and delegates, and preparing speeches and arguments to deliver and interpret. Collaboration with participants in M.A. translation courses is sought. Requires independent study plan agreed with course instructor.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PDG1	Yana Carver, Shawn Parry-Giles W 11:00am - 12:15pm *Will meet on 09/09 and 10/28.*	Seats (Total: 30) ONLINE

COMM769 **Professional Practice Forum in Interpreting: Workplace Processes and Procedures; Workplace Processes and Procedures Interpreting**

Credits: 1 Grading Method: Regular, Audit

Provides in-depth exploration of processes and procedures in public service, legal, and political settings where interpreting services are commonplace. Enables students to make informed career plans and choices. Empowers participants by helping to establish and reinforce identity as a professional interpreter, develop specializations, and pursue professional and career development opportunities through interaction with members of the profession, professional organizations, and institutions in the language industry.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PDG1	Miriam Stanicic Sa 8:30am - 10:30am *Class dates are: 09/12; 09/26; 10/10; 10/24; 11/07; 11/21; 12/05.*	Seats (Total: 30) ONLINE

COMM789 **Seminar: Special Topics in Intercultural Communication; Advanced Intercultural Communications/Negotiations**

Credits: 3 Grading Method: Regular, Audit

Explores special topic areas within the study of intercultural communication, such as culture and conflict, intercultural negotiation, cross-cultural relationships.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Lauren Edelstein Th 1:00pm - 3:30pm Class time/details on ELMs *Class meetings on campus are on: 9/10; 9/24; 10/8; 10/22; 11/5; 11/19; 12/3*	Seats (Total: 30) SKN 3118 ONLINE	 Discussion

COMM798 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

An individual course designed for intensive study or research of problems in communication.

Contact department for information to register for this course.

COMM798F **Independent Study; English Fluency Enhancement**

Credits: 1-3 Grading Method: Regular, Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PDG1	Mollie Kaufer	Seats (Total: 16)
	Class time/details on ELMs	ONLINE

COMM799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

COMM888 **Doctoral Practicum in Communication**

(Perm req)

Credits: 3-9 Grading Method: Regular, Audit

Analysis of professional activity through personal observation. Evaluation of the purpose, process, effectiveness, and efficiency of professional activity. Recommendations for training and further research.

Contact department for information to register for this course.

COMM889 **Doctoral Tutorial in Communication**

(Perm req)

Credits: 3-9 Grading Method: Regular, Audit

Individual research in communication.

Contact department for information to register for this course.

COMM898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

COMM899 **Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

CPBE College Park Scholars-Business, Society, and Economy — Fall 2020

CPBE100 College Park Scholars: Business, Society & the Economy First-Year Colloquium

Credits: 1 Grading Method: Regular

Restriction: Students must be matriculated into the College Park Scholars Business, Society & the Economy (CPBE) program.

Introductory colloquium: Examination of issues related to business, society and the economy.

0101	Claudia Donnelly	Seats (Total: 45)	
	Tu 5:00pm - 5:50pm	ONLINE	
	Tu 6:00pm - 6:50pm	ONLINE	Lab
0201	Claudia Donnelly	Seats (Total: 45)	
	Tu 5:00pm - 5:50pm	ONLINE	
	Tu 6:00pm - 6:50pm	ONLINE	Lab

CPBE225 Enterprise Communications

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSOC

Prerequisite: CPBE100. Restriction: Must be enrolled in College Park Scholars' Business, Society and the Economy (CPBE) program. Formerly: CPSP220.

Examines basic interpersonal communication processes within written and oral channels, with practical applications for the business environment.

0101	Ira Koretsky	Seats (Total: 33)	
	MW 11:00am - 12:15pm	ONLINE	
	Tu 5:00pm - 6:50pm	ONLINE	Lab
	Class time/details on ELMs	ONLINE	Lab
0102	Ira Koretsky	Seats (Total: 33)	
	MW 9:30am - 10:45am	ONLINE	
	Tu 5:00pm - 6:50pm	ONLINE	Lab
	Class time/details on ELMs	ONLINE	Lab

CPET College Park Scholars-Environment, Technology & Economy — Fall 2020

CPET100 **College Park Scholars: Environment, Technology & Economy First-Year Colloquium I**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Environment, Technology & Economy (CPET) program.

Introductory colloquium: Examination of issues related to the convergence of the environment, technology and the economy.

Class will meet in lecture OR discussion each week. For the first class meeting, both sections meet in LECTURE. Students will then be given schedule for semester.

0101	Tim Knight, Edward Sinnes	Seats (Total: 96)
	Tu 5:10pm - 6:30pm	ONLINE

CPET200 **College Park Scholars: Environment, Technology & Economy Second-Year Colloquium**

Credits: 1 Grading Method: Regular

Prerequisite: CPET101. Restriction: Students must be enrolled in the College Park Scholars Environment, Technology & Economy (CPET) program.

Advanced colloquium: Continued examination of issues related to sustainable development.

0101	Edward Sinnes, Tim Knight	Seats (Total: 96)
	W 5:10pm - 6:30pm	ONLINE

CPGH College Park Scholars-Global Public Health — Fall 2020

CPGH100 **College Park Scholars: Global Public Health First-Year Colloquium I**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Introductory colloquium: Examination of factors that determine the health status of populations around the world.

0101	Muhiuddin Haider, Elisabeth Maring, Reva Datar, Gislaine Hoyah, Haley Axton W 3:00pm - 4:30pm	Seats (Total: 96) ONLINE

CPGH200 **College Park Scholars: Global Public Health Second-Year Colloquium**

Credits: 1 Grading Method: Regular General Education: DSSP

Prerequisite: CPGH101. Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Building on knowledge and skills gained from the first-year colloquia, students will develop public health interventions that address a public health issue of a particular community.

0101	Gislaine Hoyah, Reva Datar, Muhiuddin Haider M 5:00pm - 6:15pm	Seats (Total: 95) ONLINE

CPJT College Park Scholars-Justice and Legal Thought Fall 2020

CPJT100 **College Park Scholars: Justice & Legal Thought: First-Year Colloquium**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Justice & Legal Thought (CPJT) program.

Students will gain an experiential understanding of law and justice by investigating concepts and frameworks of justice and apply them to real-world experience.

0101	Erica Smith W 5:00pm - 6:15pm	Seats (Total: 90) ONLINE

CPJT200 **Justice and legal Thought Second Year Colloquium**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Justice and Legal Thought (CPJT) program. Additional information: When combined with the first year CPJT colloquia, students will learn how to research issues discussed and debated throughout year one.

Advanced colloquium for second year students related to research skill development

0101	Erica Smith	Seats (Total: 90)
	Th 2:00pm - 3:15pm	ONLINE

CPMS College Park Scholars-Media, Self and Society Fall 2020

CPMS100 **College Park Scholars: Media, Self & Society First-Year Colloquium I**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Media, Self & Society (CPMS) program.

Introductory colloquium: Examination of issues related to the media.

0101	Kelly Brower, Alison Burns	Seats (Total: 90)
	Tu 3:30pm - 4:45pm	ONLINE

CPMS225 **Analyzing Media Practice through Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

Prerequisite: CPMS100. Restriction: Must be in the Scholars Media, Self & Society Program. Formerly: CPSP222.

Media analysis investigating patterns of ownership, the working of media organizations, patterns of coverage and the nature of audiences.

0101	Kelly Brower, Alison Burns	Seats (Total: 90)
	TuTh 12:30pm - 1:45pm	ONLINE

CPMS230 **College Park Scholars: Media, Self & Society - Internship Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPMS101. Restriction: Students must be enrolled in the College Park Scholars Media, Self & Society (CPMS) program.

Supervised internship project in an area related to media, self and society.

0101	Kelly Brower, Alison Burns	Seats (Total: 10)
	Contact instructor or department for details.	

CPPL College Park Scholars-Public Leadership Fall 2020

CPPL100 **College Park Scholars: Public Leadership First-Year Colloquium I**

Credits: 1 Grading Method: Regular General Education: DVCC

Restriction: Students must be enrolled in the College Park Scholars Public Leadership (CPPL) program.

Introductory colloquium: Examination of issues related to public leadership.

0101	Ricco Hall, Kelly Brower W 5:00pm - 5:50pm	Seats (Total: 35) ESJ 1202	
0201	Ricco Hall, Kelly Brower W 6:00pm - 6:50pm	Seats (Total: 35) ESJ 1202	

CPPL200 **College Park Scholars: Public Leadership - Applied Leadership Capstone I**

Credits: 1 Grading Method: Regular

Prerequisite: CPPL101. Restriction: Students must be enrolled in the College Park Scholars Public Leadership (CPPL) program.

Planning and initiation of team, community-based-learning projects.

Alternating face-to-face/online meeting. See instructor for details.

0101	Mathew Feehan W 6:00pm - 7:15pm	Seats (Total: 70) ESJ 0215	

CPSA College Park Scholars-Arts Fall 2020

CPSA100 **College Park Scholars: Arts First-Year Colloquium I**

Credits: 1 Grading Method: Regular

Restriction: Students must be matriculated into the College Park Scholars Arts (CPSA) program.

Introductory colloquium: Aesthetic, intellectual and personal examination of the arts.

0101	Heather-Erin Bremenstuhl, Harold Burgess, Gabrielle Robinson-Tillenburg M 6:00pm - 7:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE	 Discussion

0102	Gabrielle Robinson-Tillenburg, Heather-Erin Bremenstuhl, Harold Burgess M 6:00pm - 7:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE	Discussion
0103	Gabrielle Robinson-Tillenburg, Harold Burgess, Heather-Erin Bremenstuhl M 6:00pm - 7:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE	Discussion

CPSA149 **College Park Scholars: Arts Service-Learning Outreach**

Credits: 2 Grading Method: Regular

Service-Learning outreach to Prince George's County schools and non-profit agencies.

0101	Harold Burgess Th 5:00pm - 7:00pm	Seats (Total: 10) ONLINE	

CPSA200 **College Park Scholars: Arts Second-Year Colloquium I**

Credits: 1 Grading Method: Regular

Prerequisite: CPSA101. Restriction: Students must be matriculated into the College Park Scholars Arts (CPSA) program. Additional information: When paired with successful completion of CPSA 240, 250 or 260, students will earn General Education Scholarship-in-Practice credit.

Advanced colloquium I: Examination of the arts in society; and preparation for "Scholarship-in-Practice" project.

0101	Gabrielle Robinson-Tillenburg, Heather-Erin Bremenstuhl, Harold Burgess Tu 6:00pm - 7:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE	Discussion
0102	Harold Burgess, Gabrielle Robinson-Tillenburg, Heather-Erin Bremenstuhl Tu 6:00pm - 7:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE	Discussion

0103	Harold Burgess, Heather-Erin Bremenstuhl, Gabrielle Robinson-Tillenburg Tu 6:00pm - 7:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE	Discussion

CPSD College Park Scholars-Science, Discovery & the Universe Fall 2020

CPSD100 **College Park Scholars: Science, Discovery & the Universe First-Year Colloquium A**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program. Additional information: Both freshman colloquia (CPSD 100 and 101) are required for students to earn their College Park Scholars citations; however, they can be taken in any order during a student's first year.

Introductory colloquium: Examination of issues related to science, discovery and the universe.

0101	Alan Peel, Erin Thomson Th 3:30pm - 4:30pm	Seats (Total: 45) ONLINE

CPSD101 **College Park Scholars: Science, Discovery & the Universe First-Year Colloquium B**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program. Additional information: Both freshman colloquia (CPSD 100 and 101) are required for students to earn their College Park Scholars citations; however, they can be taken in any order during a student's first year.

Introductory colloquium: Examination of the intersection of astronomy and culture; and the roles of science, exploration and communication in the process of discovery.

0101	Alan Peel, Erin Thomson Th 3:30pm - 4:30pm	Seats (Total: 45) ONLINE

CPSD200 **College Park Scholars: Science, Discovery & the Universe Second-Year Colloquium**

Credits: 1 Grading Method: Regular

Prerequisite: CPSD100 and CPSD101. Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program.

Advanced colloquium: Continued examination of issues related to science, discovery and the universe.

0101	Alan Peel, Erin Thomson Th 5:30pm - 6:30pm	Seats (Total: 85) ONLINE

CPSF College Park Scholars-Life Sciences — Fall 2020

CPSF100 **College Park Scholars: Life Sciences First-Year Colloquium I**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Life Sciences (CPSF) program.

Introductory colloquium: Examination of issues related to the life sciences.

0101	James McClellan, Beth Parent W 3:30pm - 5:30pm	Seats (Total: 100) ONLINE

CPSG College Park Scholars-Science and Global Change — Fall 2020

CPSG100 **College Park Scholars: Science & Global Change First-Year Colloquium I**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science & Global Change (CPSG) program.

Introductory colloquium: Examination of issues related to science and global change.

0101	John Merck, Thomas Holtz Tu 3:30pm - 4:50pm	Seats (Total: 92) ONLINE

CPSG200 **College Park Scholars: Science & Global Change Second-Year Colloquium**

Credits: 1 Grading Method: Regular

Prerequisite: CPSG101. Restriction: Students must be enrolled in the College Park Scholars Science & Global Change (CPSG) program.

Advanced colloquium: Continued examination of issues related to science and global change.

0101	John Merck, Thomas Holtz M 3:30pm - 4:50pm	Seats (Total: 90) ONLINE

CPSN College Park Scholars-International Studies Fall 2020

CPSN100 **College Park Scholars: International Studies First-Year Colloquium I**

Credits: 2 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars International Studies (CPSN) program.

Introductory colloquium: Examination of issues related to international studies.

0101	Seo Chung, Arona Baigal, Annie Rappeport, James Glass, Autumn Perkey W 4:45pm - 6:30pm	Seats (Total: 25) ONLINE
0102	Annie Rappeport, Autumn Perkey, Seo Chung, Arona Baigal, James Glass W 4:45pm - 6:30pm	Seats (Total: 22) ONLINE
0103	Annie Rappeport, Arona Baigal, Seo Chung, Autumn Perkey, James Glass W 4:45pm - 6:30pm	Seats (Total: 25) ONLINE
0104	Annie Rappeport, Arona Baigal, Seo Chung, Autumn Perkey, James Glass W 4:45pm - 6:30pm	Seats (Total: 22) ONLINE

CPSN230 **College Park Scholars: International Studies - Internship Practicum**

Credits: 3 Grading Method: Regular

Prerequisite: CPSN101. Restriction: Students must be enrolled in the College Park Scholars International Studies (CPSN) program.

Supervised internship project in an area related to international studies.

0101	James Glass Contact instructor or department for details.	Seats (Total: 10)

CPSP College Park Scholars Program Fall 2020

CPSP218L **College Park Scholars Second-Year Colloquium I; Life Sciences**

(Perm req)

Credits: 1 Grading Method: Regular

Colloquium for specific College Park Scholars Program.

Restricted to College Park Scholars - Life Sciences. First lecture of the semester for all sections meet virtually on Tuesday, September 1st, from 4pm-5pm.

0101	Beth Parent **Meets September 8, 2020 - October 20, 2020** Tu 4:00pm - 5:50pm	Seats (Total: 25) ONLINE
0201	Francisca Saavedra, Reid Compton **Meets September 3, 2020 - October 15, 2020** Th 4:00pm - 5:50pm	Seats (Total: 25) ONLINE
0301	Amanda Schech **Meets October 27, 2020 - December 8, 2020** Tu 4:00pm - 5:50pm	Seats (Total: 25) ONLINE
0401	Lee Friedman **Meets October 22, 2020 - December 10, 2020** Th 4:00pm - 5:50pm	Seats (Total: 25) ONLINE

CPSP239A **Practicum: Internship**

Credits: 1 Grading Method: Regular

Supervised internship in interest area related to the theme of the students' College Park Scholars program.

0101	Harold Burgess, Heather-Erin Bremenstuhl Contact instructor or department for details.	Seats (Total: 10)

CPSP239L **Practicum: Internship**

Credits: 1 Grading Method: Regular

Supervised internship in interest area related to the theme of the students' College Park Scholars program.

Contact department for information to register for this course.

CPSP239P **Practicum: Internship; Individual Practicum**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Supervised internship in interest area related to the theme of the students' College Park Scholars program.

0101	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

CPSP249L **Practicum: Service-Learning; Life Sciences**

Credits: 2 Grading Method: Regular

Supervised Service-Learning project in area related to the theme of the students' College Park Scholars program.

Restricted to College Park Scholars - Life Sciences.

0101	Beth Parent	Seats (Total: 20)
	Contact instructor or department for details.	

CPSP249P **Practicum: Service-Learning**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Supervised Service-Learning project in area related to the theme of the students' College Park Scholars program.

0101	Kelly Brower	Seats (Total: 1)
	Contact instructor or department for details.	

CPSP259I **Practicum: Research**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Supervised research project in interest area related to the students' College Park Scholars program.

Contact department for information to register for this course.

CPSP259J **Practicum: Research; Media, Self, and Society**

Credits: 1-2 Grading Method: Regular

Supervised research project in interest area related to the students' College Park Scholars program.

Restricted to students in College Park Scholars Media, Self, and Society Program

Contact department for information to register for this course.

CPSP269B **Practicum: Peer Teaching**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP269E **Practicum: Peer Teaching**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP269F **Practicum: Peer Teaching**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP269N **Practicum: Peer Teaching**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP318B **College Park Scholars Special Topics; Business, Society and Economics**

(Perm req)

Credits: 1 Grading Method: Regular

Special Topics learning opportunities in College Park Scholars.

Contact department for information to register for this course.

CPSP318N **College Park Scholars Special Topics**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special Topics learning opportunities in College Park Scholars.

Contact department for information to register for this course.

CPSP339 **Advanced Practicum: Internship**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Independent study designed for students who wish to extend in greater depth and detail projects begun in sophomore year. Subject varies. Overseen by faculty director or mentor.

Contact department for information to register for this course.

CPSP339P **Advanced Practicum: Internship**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Independent study designed for students who wish to extend in greater depth and detail projects begun in sophomore year. Subject varies. Overseen by faculty director or mentor.

0101	Kelly Brower, Susannah Washburn	Seats (Total: 10)
	Contact instructor or department for details.	

CPSP349T **STS Infrastructure and Society Service Learning Project**

Credits: 3 | Grading Method: Regular | General Education: DSSP

0101	David Tomblin	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	CCC 1205

CPSP359B **Advanced Practicum: Research: Using Company Culture to Gain a Competitive Advantage**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Contact department for information to register for this course.

CPSP359N **Advanced Practicum: Research: International Studies**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

0101	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

CPSP369A **Advanced Practicum: Peer Teaching; Arts**

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369D **Advanced Practicum: Peer Teaching; Science, Discovery, and the Universe**

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369E **Advanced Practicum: Peer Teaching**

Credits: 2 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369G **Advanced Practicum: Peer Teaching**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369L **Advanced Practicum: Peer Teaching; Life Sciences**

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369N **Advanced Practicum: Peer Teaching; International Studies**

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369P **Advanced Practicum: Peer Teaching; Public Leadership**

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369T **Advanced Practicum: Peer Teaching; Science, Technology, and Society**

(Perm req)

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP388E **Advanced Special Topics in College Park Scholars; Advanced Special Topics in College Park Scholars**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Interdisciplinary topics of special interest to College Park Scholars, such as legacies of the cold war, environmental ethics, women in leadership, and other timely issues. Projects build on previous work in College Park Scholars.

Independent study to allow continuation of Connection Project from CPET101.

Contact department for information to register for this course.

CPSS College Park Scholars-Science, Technology and Society Fall 2020

CPSS100 **College Park Scholars: Science, Technology & Society First-Year Colloquium I**

Credits: 2 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science, Technology & Society (CPSS) program.

Introductory colloquium: Examination of issues related to science, technology and society.

0101	David Tomblin, Nicole Mogul M 3:15pm - 4:50pm M 4:00pm - 4:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0102	Nicole Mogul, David Tomblin M 3:15pm - 4:50pm M 4:00pm - 4:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0103	Nicole Mogul, David Tomblin M 3:15pm - 4:50pm M 4:00pm - 4:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0104	Nicole Mogul, David Tomblin M 3:15pm - 4:50pm M 4:00pm - 4:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion

0105	Nicole Mogul, David Tomblin M 3:15pm - 4:50pm M 4:00pm - 4:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0106	Nicole Mogul, David Tomblin M 3:15pm - 4:50pm M 4:00pm - 4:50pm	Seats (Total: 15) ONLINE ONLINE	 Discussion

CPSS220 **The Future of Science Communication**

Credits: 3 Grading Method: Regular General Education: DVCC

Restriction: Must be in the College Park Scholars Science, Technology or Society program or have permission of the program.

How can scientists communicate their work effectively? The field of science communication ventures that the answer is not simply a matter of improving capacity (e.g., because people lack scientific information, scientists lack communication skills, or both). Rather, it calls for sustained collaboration and empathy between laypersons and experts. In this hands-on, experiential course, we use a model of cultural competency to put forth solutions to bridge the expert-lay divide. We investigate typical venues in which science is communicated (museums, YouTube videos, federal agency websites, and much much more) and study best practices for communication. Then we explore emerging venues that support sustained contact between so-called "lay citizens" and scientific or technical experts (dance/improv techniques, ethnographic methods and citizen science). Students learn to use cross-cultural perspectives as a basis to pilot and test ways of strengthening relationships and improving communication.

0101	Nicole Mogul TuTh 11:00am - 12:15pm	Seats (Total: 20) CCC 1205

CPSS225 **College Park Scholars Capstone: Science, Technology, and Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

Prerequisite: CPSS100. Restriction: Must be in the College Park Scholars Science, Technology & Society (CPSS) program. Formerly: CPSP227.

Exploration and understanding of ways science and technology shape and are shaped by society.

0101	Matthew Aruch TuTh 12:30pm - 1:45pm	Seats (Total: 20) CCC 1205

CPSS240 **College Park Scholars: Science, Technology & Society - Service-Learning Practicum**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

Restriction: Matriculation into the College Park Scholars Science, Technology & Society (CPSS) program; or permission of instructor.

Supervised Service-Learning practicum in issues related to science, technology and society.

Most of the class times will be spent at area Prince George's schools with partnering robotics teams. Consult the class requirements and locations provided in the syllabus at the beginning of the class. This course requires a $61 background check fee for working in Prince Georges County K-12 schools.

0101	Timothy Reedy TuTh 2:00pm - 3:15pm	Seats (Total: 15) CBD 1140	
0201	Timothy Reedy TuTh 3:30pm - 4:45pm	Seats (Total: 15) CBD 1140	

DANC Dance Fall 2020

DANC109 **Choreography I: Improvisation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introduction to the process of spontaneous movement discovery involving solo and group movement experiences.

Prerequisite: by permission of department. Students must pay a $25.00 lab fee.

5501	Sara Pearson TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE	Lab

DANC138C **Global Dance Forms; Chinese Dance**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit , D

Movement course. Traditional dances and music of selected cultures.

5501	Xinran Qi MW 2:00pm - 3:15pm	Seats (Total: 25) PAC 1908	Lab

DANC138P **Global Dance Forms; Hip Hop**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit , D

Movement course. Traditional dances and music of selected cultures.

Students must pay a $25.00 lab fee

5501	Ama Law	Seats (Total: 25)	
	Tu 3:30pm - 6:00pm	ONLINE	Lab

DANC138Z **Global Dance Forms; Disco Dance**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit , D

Movement course. Traditional dances and music of selected cultures.

5501	Gabriel Mata-Ortega	Seats (Total: 25)	
	MW 3:30pm - 4:45pm	PAC 1610	Lab

DANC148 **Fundamentals of Modern Dance**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Introduction to modern dance with emphasis on the development of fundamental movement skills.

Students must pay a $25.00 lab fee.

5504	Patrik Widrig	Seats (Total: 30)	
	TuTh 2:00pm - 3:15pm	ONLINE	Lab

DANC179 **Movement Integration**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Conditioning and re-patterning techniques for achieving integrated movement.

Students must pay a $25.00 lab fee.

5501	Adriane Fang	Seats (Total: 20)	
	TuTh 2:00pm - 3:15pm	ONLINE	Lab

DANC199 **Practicum in Choreography, Production and Performance I**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Choreography, production, and performance of student works, both on and off campus.

Contact department for information to register for this course.

DANC200 **Introduction to Dance**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA, D | General Education: DSSP

A study of dance as a form of communication and as an art form; a survey of the theories and styles of dance, and their relationships to other art forms.

0101	Amber Daniels TuTh 2:00pm - 3:15pm	Seats (Total: 25) ONLINE	
0201	Tristan Koepke TuTh 12:30pm - 1:45pm	Seats (Total: 15) ONLINE	
0301	Renee Gerardo Th 11:00am - 12:15pm Tu 11:00am - 12:15pm	Seats (Total: 25) PAC 1912 ONLINE	
0401	Christina Robson Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 20) ONLINE PAC 1610	
FC01	Susan Miller Th 3:00pm - 4:15pm Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 22) PAC 1912 ONLINE	Discussion

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DANC200S **Introduction to Dance**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA, D | General Education: DSSP

A study of dance as a form of communication and as an art form; a survey of the theories and styles of dance, and their relationships to other art forms.

Restricted to College Park Scholars - Arts.

0201	Tristan Koepke TuTh 12:30pm - 1:45pm	Seats (Total: 15) ONLINE

DANC218 **Modern Dance I**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Development of heightened body awareness, breath support, dynamic alignment, and spatial awareness. Focus on rhythmic clarity and musicality.

Prerequisite: permission of department. Students must pay a $25.00 lab fee.

5501	Adriane Fang	Seats (Total: 17)	
	MWF 1:00pm - 2:30pm	ONLINE	Lab

DANC219 **Modern Dance II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Continuation of the elements addressed in DANC218 with an added focus on momentum, the use of counter-tension, stability/mobility, suspension, and dynamic range.

Prerequisite: DANC218 and permission of department. Students must pay a $25.00 lab fee.

5501	Adriane Fang	Seats (Total: 8)	
	MWF 1:00pm - 2:30pm	ONLINE	Lab

DANC228 **Ballet I**

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Barre and center work for alignment, strength, flexibility and coordination. Introduction to ballet terminology.

Prerequisite: permission of department. Students must pay a $25.00 lab fee.

5501	Marielis Garcia	Seats (Total: 10)	
	TuTh 2:00pm - 3:15pm	ONLINE	Lab

DANC229 **Ballet II**

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC228.

Prerequisite: permission of department. Students must pay a $25.00 lab fee.

5501	Marielis Garcia TuTh 2:00pm - 3:15pm	Seats (Total: 10) ONLINE	Lab

DANC299 **Practicum in Choreography, Production and Performance II**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC199.

Contact department for information to register for this course.

DANC304 **Dance Education I: Foundations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-Dance department.

Organization and content of the studio dance class. Structuring developmentally appropriate dance experiences for students ages 3-18.

0101	Crystal Davis MW 11:00am - 12:15pm	Seats (Total: 15) ONLINE

DANC309 **Choreography III: Dance Composition**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploration of the structural elements of dance composition.

5501	Alvin Mayes M 3:00pm - 4:45pm W 3:00pm - 4:45pm	Seats (Total: 15) ONLINE PAC 1912

DANC318 **Modern Dance III**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Continuation of the elements addressed in DANC219 with an added focus on off-verticality, spirals, complex level changes, more complex and extended phrasing, responsiveness to accompaniment, vocalization.

Prerequisite: DANC219 and permission of department. Students must pay a $25.00 lab fee.

5501	Patrik Widrig	Seats (Total: 11)	
	MWF 9:00am - 10:30am	ONLINE	Lab

DANC319 **Modern Dance IV**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Continuation of the elements addressed in DANC318 with an added focus on movement subtlety and complexity, and stylistic demands.

Prerequisite: DANC318 and permission of department. Students must pay a $25.00 lab fee.

5501	Patrik Widrig	Seats (Total: 14)	
	MWF 9:00am - 10:30am	ONLINE	Lab

DANC328 **Ballet III**

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Execution of the vocabulary of ballet movement with technical accuracy.

5501	Kendra Portier	Seats (Total: 10)	
	TuTh 11:00am - 12:15pm	ONLINE	

DANC329 **Ballet IV**

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC328.

5501	Kendra Portier	Seats (Total: 10)	
	TuTh 11:00am - 12:15pm	ONLINE	

DANC386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-School of Theatre, Dance & Performance Studies department.

Contact department for information to register for this course.

DANC398 **Directed Studies in Dance**

(Perm req)

Credits: 1-6 Grading Method: Regular

0101	Patrik Widrig Class time/details on ELMs	Seats (Total: 3) ONLINE
0201	Sara Pearson Class time/details on ELMs	Seats (Total: 3) ONLINE
0301	Maura Keefe Class time/details on ELMs	Seats (Total: 3) ONLINE
0401	Alvin Mayes Class time/details on ELMs	Seats (Total: 5) ONLINE
0501	Instructor: TBA Class time/details on ELMs	Seats (Total: 3) ONLINE
0601	Kendra Portier Class time/details on ELMs	Seats (Total: 3) ONLINE
0701	Crystal Davis Class time/details on ELMs	Seats (Total: 3) ONLINE
0801	Instructor: TBA Class time/details on ELMs	Seats (Total: 3) ONLINE
0901	Instructor: TBA Class time/details on ELMs	Seats (Total: 3) ONLINE
1001	Adriane Fang Class time/details on ELMs	Seats (Total: 3) ONLINE

DANC399 **Practicum in Choreography, Production and Performance III**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC299.

Prerequisite: DANC 299.

0101	Adriane Fang Class time/details on ELMs	Seats (Total: 5) ONLINE	
0201	Sara Pearson Class time/details on ELMs	Seats (Total: 5) ONLINE	
0301	Maura Keefe Class time/details on ELMs	Seats (Total: 5) ONLINE	
0401	Alvin Mayes Class time/details on ELMs	Seats (Total: 5) ONLINE	
0501	Instructor: TBA Class time/details on ELMs	Seats (Total: 15) ONLINE	
0601	Instructor: TBA Class time/details on ELMs	Seats (Total: 5) ONLINE	Lab
0701	Crystal Davis Class time/details on ELMs	Seats (Total: 5) ONLINE	
0801	Instructor: TBA Class time/details on ELMs	Seats (Total: 5) ONLINE	
0901	Instructor: TBA Class time/details on ELMs	Seats (Total: 5) ONLINE	Lab
1001	Adriane Fang Class time/details on ELMs	Seats (Total: 15) ONLINE	

DANC448 **Modern Dance V**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Complex phrases of modern dance movement with emphasis on articulation and expression.

Prerequisite: DANC349 and aududition. Students must pay a $25.00 lab fee.

5501	Kendra Portier MWF 9:00am - 10:30am	Seats (Total: 10) ONLINE	Lab

DANC449 **Modern Dance VI**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC448.

Prerequisite: DANC 448 and permission from the department Students must pay a $25.00 lab fee.

5501	Kendra Portier MWF 9:00am - 10:30am	Seats (Total: 5) ONLINE	Lab

DANC485 **Seminar in Dance**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS

Prerequisite: DANC483. Restriction: Must be in Dance program; and senior standing.

Individual research leading to a presentation with written documentation of the process, serving as a culmination of undergraduate study for dance majors.

This course will focus on Digital and Interactive Art Practice

0101	Marielis Garcia TuTh 9:30am - 10:45am	Seats (Total: 6) ONLINE

DANC499 **Practicum in Choreography, Production and Performance IV**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Advanced workshop in dance presentation, including performing, production and planned field experiences.

Prerequisite: DANC 399.

0101	Patrik Widrig Class time/details on ELMs	Seats (Total: 5) ONLINE
0201	Sara Pearson Class time/details on ELMs	Seats (Total: 5) ONLINE
0301	Maura Keefe Class time/details on ELMs	Seats (Total: 5) ONLINE

0401	Alvin Mayes Class time/details on ELMs	Seats (Total: 5) ONLINE
0501	Paul Jackson Class time/details on ELMs	Seats (Total: 15) ONLINE
0601	Instructor: TBA Class time/details on ELMs	Seats (Total: 5) ONLINE
0701	Crystal Davis Class time/details on ELMs	Seats (Total: 5) ONLINE
0801	Instructor: TBA Class time/details on ELMs	Seats (Total: 5) ONLINE
0901	Instructor: TBA Class time/details on ELMs	Seats (Total: 5) ONLINE
1001	Adriane Fang Class time/details on ELMs	Seats (Total: 15) ONLINE

DANC600 **Graduate Dance Research**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Supervised writing of reports and articles on selected dance subjects. Study of library resources and interviewing techniques. Preparation for written documentation of thesis project.

0101	Melissa Blanco Borelli Tu 3:30pm - 6:00pm	Seats (Total: 5) ONLINE

DANC604 **Graduate Studies in Dance Pedagogy**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be admitted to MFA in Dance; or permission of ARHU-School of Theatre, Dance & Performance Studies department.

Curriculum writing, lesson planning, class structure, assessment/grading, and practice in dance pedagogy. Includes preparation of syllabi and studio teaching practice. This course counts towards teaching ceritification in the State of Maryland.

Students must pay a $25 lab fee.

5501	Crystal Davis	Seats (Total: 4)	
	Tu 2:00pm - 3:15pm	ONLINE	
	Th 3:00pm - 4:45pm	ONLINE	Lab

DANC608 **Graduate Choreography I: Creative Process**

Credits: 3 Grading Method: Regular, Audit

Developing and defining individual choreographic voice and vision in a shared studio setting.

Prerequisite: Admission to MFA in Dance or permission of department. Students must pay a $25.00 lab fee. Developing and defining individual choreographic voice and vision in a s ared studio setting.

5501	Sara Pearson	Seats (Total: 5)	
	MW 11:00am - 12:50pm	ONLINE	Lab

DANC610 **Workshop in the Direction of Dance Production**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Prerequisite: DANC410; or students who have taken courses with comparable content may contact the department.

A lecture/laboratory course dealing with the relationship of the director to all of the activities involved in the presentation of a dance concert.

5501	Kendra Portier, Samuel Crawford	Seats (Total: 5)	
	M 1:30pm - 2:45pm	ONLINE	
	W 1:30pm - 2:45pm	PAC 1610	

DANC648 **Advanced Modern Dance Technique I**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Professional level training in contemporary dance techniques.

Students must pay a $25 lab fee.

5501	Kendra Portier MWF 9:00am - 10:30am	Seats (Total: 5) ONLINE

DANC649 **Advanced Modern Dance Technique II**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

A continuation of DANC 648.

Students must pay a $25 lab fee.

5501	Kendra Portier MWF 9:00am - 10:30am	Seats (Total: 5) ONLINE

DANC678 **Individual Movement Practice**

(Perm req)

Credits: 2 Grading Method: Regular

Students in consultation with the adviser, propose a specific movement practice and can select the practice from the range of technique offerings in the program. Additional work in documenting and providing evidence of growth towards individual outcomes is required.

Contact department for information to register for this course.

DANC679 **Graduate Dance Performance**

Credits: 1-3 Grading Method: Regular, Audit

An advanced performance course focusing on the restagings from noted scores of the choreographic works of significant artists in the field.

0101	Patrik Widrig Class time/details on ELMs	Seats (Total: 5) ONLINE
0201	Sara Pearson Class time/details on ELMs	Seats (Total: 5) ONLINE
0301	Maura Keefe Class time/details on ELMs	Seats (Total: 5) ONLINE
0401	Alvin Mayes Class time/details on ELMs	Seats (Total: 5) ONLINE

0501	Instructor: TBA Class time/details on ELMs	Seats (Total: 5) ONLINE
0601	Maura Keefe Class time/details on ELMs	Seats (Total: 5) ONLINE
0701	Crystal Davis Class time/details on ELMs	Seats (Total: 5) ONLINE
0801	Instructor: TBA Class time/details on ELMs	Seats (Total: 5) ONLINE
1001	Adriane Fang Class time/details on ELMs	Seats (Total: 5) ONLINE

DANC689B **Special Topics in Dance; Graduate Ballet**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Special Topics in dance theory, research or creative projects.

5501	Kendra Portier TuTh 11:00am - 12:15pm	Seats (Total: 5) ONLINE

DANC689I **Special Topics in Dance; Dance Pedagogy: Improvisation**

(Perm req)

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Special Topics in dance theory, research or creative projects.

0101	Sara Pearson Class time/details on ELMs	Seats (Total: 1) ONLINE

DANC689W **Special Topics in Dance; MFA Thesis Writing Lab**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Special Topics in dance theory, research or creative projects.

Contact Instructor for meeting times.

0101	Maura Keefe M 3:30pm - 4:30pm	Seats (Total: 4) PAC 2804

DANC698 **Independent Study in Dance**

Credits: 1-3 Grading Method: Regular, Audit

Directed independent study in theoretical topics.

0101	Patrik Widrig Class time/details on ELMs	Seats (Total: 3) ONLINE
0201	Sara Pearson Class time/details on ELMs	Seats (Total: 3) ONLINE
0301	Maura Keefe Class time/details on ELMs	Seats (Total: 3) ONLINE
0401	Alvin Mayes Class time/details on ELMs	Seats (Total: 5) ONLINE
0501	Instructor: TBA Class time/details on ELMs	Seats (Total: 3) ONLINE
0601	Kendra Portier Class time/details on ELMs	Seats (Total: 3) ONLINE
0701	Crystal Davis Class time/details on ELMs	Seats (Total: 3) ONLINE
0801	Leayne Dempsey Class time/details on ELMs	Seats (Total: 3) ONLINE
1001	Adriane Fang Class time/details on ELMs	Seats (Total: 3) ONLINE

DANC719 **Graduate Choreography III: Projects**

Credits: 3 Grading Method: Regular, Audit

Research-based choreographic projects in preparation for the choreographed thesis project.

Prerequisite: Admission to MFA in Dance or permission of department. Students must pay a $25.00 lab fee. Research-based choreographic projects in preparation for the choreographed thesis project.

5501	Maura Keefe MW 11:00am - 12:50pm	Seats (Total: 5) ONLINE

DANC777 **Internship in Dance**

(Perm req)

Credits: 1-5 Grading Method: Regular

Restriction: Must be admitted to MFA in Dance; or permission of ARHU-School of Theatre, Dance & Performance Studies department.

Internship in dance advocacy, administration, education, community building, choreography, or performance with an agency off campus and with a national or international profile.

0101	Crystal Davis Class time/details on ELMs	Seats (Total: 5) ONLINE

DANC788 **Master's Tutorial for Choreography; Graduate Tutorial**

Credits: 1-3 Grading Method: Regular, Audit

Supervised production and presentation of a significant choreographic project.

0101	Patrik Widrig Class time/details on ELMs	Seats (Total: 3) ONLINE
0201	Sara Pearson Class time/details on ELMs	Seats (Total: 3) ONLINE
0301	Maura Keefe Class time/details on ELMs	Seats (Total: 3) ONLINE
0401	Alvin Mayes Class time/details on ELMs	Seats (Total: 3) ONLINE
0501	Instructor: TBA Class time/details on ELMs	Seats (Total: 3) ONLINE
0601	Instructor: TBA Class time/details on ELMs	Seats (Total: 3) ONLINE

0701	Crystal Davis Class time/details on ELMs	Seats (Total: 3) ONLINE
0801	Instructor: TBA Class time/details on ELMs	Seats (Total: 3) ONLINE
1001	Adriane Fang Class time/details on ELMs	Seats (Total: 3) ONLINE

DANC799 **Master's Thesis Project**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

DATA Data Science and Analytics Fall 2020

DATA601 **Probability and Statistics**

Credits: 3 Grading Method: Regular

Prerequisite: Undergraduate courses in calculus and basic linear algebra. Cross-listed with: MSML601. Credit only granted for: DATA601 or MSML601.

Provides a solid understanding of the fundamental concepts of probability theory and statistics. The course covers the basic probabilistic concepts such as probability space, random variables and vectors, expectation, covariance, correlation, probability distribution functions, etc. Important classes of discrete and continuous random variables, their inter-relation, and relevance to applications are discussed. Conditional probabilities, the Bayes formula, and properties of jointly distributed random variables are covered. Limit theorems, which investigate the behavior of a sum of a large number of random variables, are discussed. The main concepts random processes are then introduced. The latter part of the course concerns the basic problems of mathematical statistics, in particular, point and interval estimation and hypothesis testing.

PWS1	Leonid Koralov **Meets August 31, 2020 - November 20, 2020** M 6:00pm - 9:30pm *Must be in Data Science & Analytics Program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 50) ONLINE

DATA602 **Principles of Data Science**

Credits: 3 Grading Method: Regular, Sat-Fail

Restriction: Must be in the Data Science Post-Baccalaureate Certificate of Professional Studies or Master of Professional Studies in Data Science and Analytics program. Credit only granted for: DATA602 or CMSC641. Formerly: CMSC641.

An introduction to the data science pipeline, i.e., the end-to-end process of going from unstructured, messy data to knowledge and actionable insights. Provides a broad overview of what data science means and systems and tools commonly used for data science, and illustrates the principles of data science through several case studies.

PCS1	Prem Saggar	Seats (Total: 20)	
	Meets August 31, 2020 - November 20, 2020		
	W 6:00pm - 9:30pm Class time/details on ELMs	IRB 0324 ONLINE	Discussion
	Must be in the Data Science & Analytics Program or Data Science Certificate Program. For permission to enroll, contact oes@umd.edu.		
PWS1	Prem Saggar	Seats (Total: 50)	
	Meets August 31, 2020 - November 20, 2020		
	W 6:00pm - 9:30pm	ONLINE	
	Must be in the Data Science & Analytics Program or Data Science Certificate Program. For permission to enroll, contact oes@umd.edu.		

DATA612 **Deep Learning**

Credits: 3 Grading Method: Regular

Prerequisite: DATA603 or MSML603. Cross-listed with: MSML612. Credit only granted for: DATA612 or MSML612.

This course provides an introduction to the construction and use of deep neural networks, that is models that are composed of several layers of nonlinear processing. The class will especially focus on the foundational understanding of the main features in the structure of deep neural nets that make them attractive from the computational point of view and for a sample of applications. Specific topics include the key concept of backpropagation and its importance to reduce the computational cost of the training of the neural nets, a discussion of some of the various coding tools available and how they use parallelization, and a presentation and study of convolutional neural networks. Additional topics may include autoencoders, variational autoencoders, convolutional neural networks, recurrent and recursive neural networks, generative adversarial networks, and attention-based models. The concepts introduced in the class will finally be illustrated by some examples of applications chosen among various classification/clustering questions, computer vision, natural language processing.

PWS1	Zhizhong Han	Seats (Total: 25)
	Meets August 31, 2020 - November 20, 2020	
	Tu 6:00pm - 9:30pm	ONLINE
	Must be in Data Science & Analytics Program. For permission to enroll, contact oes@umd.edu.	

DATA698 **Research Methods and Study Design**

Credits: 3 Grading Method: Regular

Expected learning outcomes include that students should be able to: compose problem specifications relevant to work environment, create project descriptions, determine data and resource requirements, propose appropriate methods analytical methods, construct research plans; determine reporting requirements appropriate to various employment situations, identify intended audiences and uses, propose supporting documentation, and possibly other outcomes. Includes ethical and legal considerations in data science. Intended to be penultimate course, though course may be taken concurrently with other courses.

PWS1	Michael Cummings	Seats (Total: 10)
	Meets August 31, 2020 - November 20, 2020	
	Contact instructor or department for details.	
	Must be in Data Science & Analytics Program. For permission to enroll, contact oes@umd.edu.	

EALL East Asian Languages and Literatures — Fall 2020

EALL300 **The Languages of East Asia**

Credits: 3 Grading Method: Regular , D General Education: DVUP

A survey of Chinese, Japanese, and Korean, and the languages of other East Asian nationalities. Provides a basic understanding of the structures of these languages. Topics covered include the characterizing features; the relationships of the languages to each other; the geographical, social, and historical settings. No knowledge of Asian languages is required. Taught in English.

0101	Samuel Ramsey	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

ECON Economics — Fall 2020

ECON111 **Thinking Like an Economist**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Restriction: Sophomore standing or lower; or permission of BSOS-Economics department.

An introduction to the modes of thought of economics. Use of simple standard tools of economics to analyze important problems that arise frequently in public policy, the news media, and in daily life. An emphasis on how economists predict what choices societies make and how economists analyze whether those are good choices. Practical application of a variety of economic tools leading to a focus on the essential unity underlying these analytical tools, viewing economics as a discipline that applies a core methodology in different ways in different situations.

0101	Peter Murrell TuTh 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Peter Murrell TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Peter Murrell TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

ECON175 Inequality: Determinants and Policy Remedies

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

History shows that the gap between the rich and the poor has varied over time within and between countries, most recently seeming to increase within many countries while somewhat decreasing between countries. This course challenges students to investigate why people make different amounts of money, why income inequality has changed dramatically in recent years, what public policy tools exist to counter inequality increases, and what different institutional arrangements different countries use to lower inequality. This course will introduce students to theoretical tools used by economists to understand the sources of inequality and will also examine various empirical measures of inequality.

0201	Ethan Kaplan MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0202	Ethan Kaplan MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

0203	Ethan Kaplan MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

ECON181 **Putting a Price on the Environment: An Economist's Perspective on Sustainability**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

How does society balance the benefits of environmental protection and preservation against the costs? Though some might say that the environment is priceless, economists recognize that every action involves trade-offs. This course investigates sustainability through comparing costs and benefits. From this perspective, other questions arise: How can we design policies that incentivize sustainable choices? Why might usual market functioning fail to achieve sustainability? Do we need to put a price on the environment in order to protect it? How do we measure an economy's "success"? This course explores the answers to these and other related questions from an economist's perspective.

0101	Erin Moody MW 9:00am - 9:50am F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Erin Moody MW 9:00am - 9:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Erin Moody MW 9:00am - 9:50am F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Erin Moody MW 9:00am - 9:50am F 12:00pm - 12:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0105	Erin Moody MW 9:00am - 9:50am F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	Erin Moody MW 9:00am - 9:50am F 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

ECON200 **Principles of Microeconomics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Prerequisite: MATH107 or MATH110; or must have math eligibility of MATH113 or higher. Credit only granted for: ECON200, AREC240, or AREC250. Additional information: It is recommended that students complete ECON200 before taking ECON201.

Introduces economic models used to analyze economic behavior by individuals and firms and consequent market outcomes. Applies conceptual analysis to several policy issues and surveys a variety of specific topics within the broad scope of microeconomics.

0101	Stefania Scandizzo TuTh 9:30am - 10:45am	Seats (Total: 350) ONLINE
0201	Stefania Scandizzo TuTh 11:00am - 12:15pm	Seats (Total: 350) ONLINE
0301	Hossein Abbasi Class time/details on ELMs	Seats (Total: 350) ONLINE
FC01	Hossein Abbasi Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 221) ONLINE

ECON201 Principles of Macroeconomics

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Prerequisite: MATH107 or MATH110; or must have math eligibility of MATH113 or higher. Recommended: ECON200. Credit only granted for: ECON201 or ECON205.

An introduction to how market economies behave at the aggregate level. The determination of national income/output and the problems of unemployment inflation, will be examined, along with monetary and fiscal policy.

0101	John Shea TuTh 2:00pm - 3:15pm	Seats (Total: 250) ONLINE
0201	Naveen Sarna Class time/details on ELMs	Seats (Total: 250) ONLINE

ECON230 Applied Economic Statistics

Credits: 3 | Grading Method: Regular

Prerequisite: Must have math eligibility of MATH113 or higher; or 1 course with a minimum grade of C- from (MATH107, MATH110). And minimum grade of C- in ECON200 and ECON201. Recommended: Students should already have basic familiarity with Microsoft Excel or similar spreadsheet software. Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course to develop understanding of statistical concepts used in applied economics. Students will acquire skills needed to calculate and interpret statistical concepts, including descriptive statistics, probability, discrete and continuous distributions, sampling, point and interval estimations, hypothesis testing, basic analysis of variance, and simple linear regression models. Students will apply these concepts to data using both handheld calculators and spreadsheets(Excel), and students will be introduced to an econometric software package such as SPSS or SAS or R.

0101	Zhenxun Liu	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

ECON305 **Intermediate Macroeconomic Theory and Policy**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in ECON201 and ECON200. And 1 course with a minimum grade of C- from (MATH120, MATH130, MATH136, MATH140); or must have completed MATH220 with a minimum grade of C-. Credit only granted for: ECON305 or ECON325.

Analysis of the determination of national income, employment, and price levels. Discussion of consumption, investment, inflation, and government fiscal and monetary policy.

0101	Martina Copelman	Seats (Total: 140)
	TuTh 9:30am - 10:45am	ONLINE
0201	Martina Copelman	Seats (Total: 140)
	TuTh 11:00am - 12:15pm	ONLINE

ECON306 **Intermediate Microeconomic Theory & Policy**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: 1 course with a minimum grade of C- from (ECON200, AREC250); and minimum grade of C- in ECON201. And 1 course with a minimum grade of C- from (MATH120, MATH130, MATH136, MATH140); or must have completed MATH220 with a minimum grade of C-. Credit only granted for: ECON306, ECON326, AREC489M, or AREC326.

Analysis of the theories of consumer behavior, producer behavior, different market structures, and various sources of inefficient outcomes. Analysis of microeconomic policies designed to improve market outcomes.

0101	Aaron Finkle MWF 11:00am - 11:50am	Seats (Total: 170) ONLINE
0201	Aaron Finkle MWF 12:00pm - 12:50pm	Seats (Total: 170) ONLINE
SG91	Satyendra Verma Class time/details on ELMs	Seats (Total: 130) ONLINE
	Restricted to BMGT-Shady Grove Seniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

ECON311 **American Economic History Before the Civil War**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Restriction: Must be in Economics Bachelor of Arts program.

Economic concepts are used to analyze various aspects of the founding and early history of the U.S., including the British settlement of the North American colonies, the economics of the American Revolutionary war, the writing of the Constitution, the development of financial markets, policies on public lands and the spread of western agriculture, slavery, banking, and early industrialization.

0101	Matthew Summers Class time/details on ELMs	Seats (Total: 40) ONLINE

ECON312 **American Economics After the Civil War**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Restriction: Must be in Economics Bachelor of Arts program.

Topics include: the economics of the Civil War, the performance of southern agriculture in the late 19th century, the rise of large corporations, industrialization, the development of financial markets, the creation of the Federal Reserve Board, the economics of the Great Depression and the New Deal, the economic impact of World War II, and the rise of the modern service economy in the late 20th century. Utilizes basic economic theories to understand these episodes as well as the progress of the U.S. economy over this period.

0101	Alka Gandhi	Seats (Total: 60)
	MWF 10:00am - 10:50am	ONLINE

ECON314 **Economic History, Development and Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON200 and ECON201.

Study abroad in the economic history, institutional development, and recent economic policy problems of selected areas.

Contact department for information to register for this course.

ECON315 **Economic Development of Underdeveloped Areas**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Credit only granted for: ECON315 or ECON416.

Analysis of the economic and social characteristics of underdeveloped areas. Recent theories of economic development, obstacles to development, policies and planning for development.

SG91	Shanjukta Nath	Seats (Total: 50)
	MW 11:00am - 12:15pm	ONLINE
	Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

ECON317 **Global Economic Policies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Restriction: Must be in Economics Bachelor of Arts program.

Analysis of policy options and debates on fostering economic growth and development in a global economy where national boundaries are no longer relevant. Topics covered will include real loanable funds markets in both local and international contexts during normal conditions and during financial crises, the design of trade and industrial policies, and the role of the World Bank, IMF, WTO, and other international agencies as well as regional and bilateral trade agreements. Emerging economies will be emphasized.

0101	Naveen Sarna TuTh 2:00pm - 3:15pm	Seats (Total: 40) ONLINE	
0201	Naveen Sarna TuTh 5:00pm - 6:15pm	Seats (Total: 40) ONLINE	

ECON321 **Economic Statistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON201 and ECON200; and minimum grade of C- in MATH141. Recommended: STAT100. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introduction to the use of statistics in economics. Topics include: Probability, random variables and their distributions, sampling theory, estimation, hypothesis testing, analysis of variance, regression analysis and correlation.

0101	Alka Gandhi MWF 12:00pm - 12:50pm	Seats (Total: 40) ONLINE	

ECON325 **Intermediate Macroeconomic Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200, ECON201, and MATH141. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON305 or ECON325.

Analysis of macroeconomic behavior and policy with emphasis on theoretical rigor. Topics include the determinants of economic growth, unemployment, inflation, and international economic flows.

0101	L Stevens MW 11:00am - 11:50am F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0102	L Stevens MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	L Stevens MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

ECON326 **Intermediate Microeconomic Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200, ECON201, and MATH141. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON306, ECON326, or AREC326.

Analysis of economic decision-making by individual buyers and sellers, and resulting market outcomes, with emphasis on theoretical rigor. The efficient properties of perfect competition are examined, followed by consideration of market power, externalities, and asymmetric information.

0101	Ginger Jin MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Ginger Jin MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0103	Ginger Jin MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

ECON330 **Money and Banking**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201.

The structure of financial institutions and their role in the provision of money and near money. Analysis of the Federal Reserve System, the techniques of central banks, and the control of supply of financial assets in stabilization policy. Relationship of money and credit to economic activity and the price level.

0101	Martina Copelman	Seats (Total: 260)
	TuTh 2:00pm - 3:15pm	ONLINE

ECON340 **International Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Credit only granted for: ECON340 or ECON441.

Introduces economic models of international trade and finance. Analyzes policies designed to promote and restrict international trade and to manage exchange rates and impact international capital flows.

Contact department for information to register for this course.

ECON358K **Special Topics in Study Abroad III; Spreadsheets and Data in Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON358L **Special Topics in Study Abroad III; Economics of Social Issues**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON358M **Special Topics in Study Abroad III; Financial Markets and Institutions**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON358N **Special Topics in Study Abroad III; History of Economic Thought**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON386 **Experiential Learning**

(Perm req)

Credits: 3 Grading Method: Sat-Fail

Prerequisite: ECON201 and ECON200. Restriction: Permission of BSOS-Economics department; and must be in a major within the BSOS-Economics department; and minimum cumulative GPA of 2.5; and junior standing or higher.

See Department Advising Office for course eligibility, course requirements, and application information.

Student and internship eligibility requirements, along with the ECON386 application, can be found at: http://ter.ps/ECON386.

Contact department for information to register for this course.

ECON387 **Career Preparation for Economics Majors**

Credits: 2 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326). Restriction: Must be in one of the following programs (Economics Bachelor of Arts; Economics Bachelor of Science) ; and must have earned a minimum of 60 credits. Additional information: This course is intended for juniors or first semester seniors who are beginning their job search. Students who have already secured an employment opportunity for after graduation should not register.

Increase student knowledge of career paths, job search tools, and strategies for successfully obtaining a job with a BA or BS in economics. Students will engage in a range of different activities which build their understanding of job opportunities in economics and hone their abilities to find positions they want. Students will reflect on specific skills employers seek from economics graduates and incorporate that knowledge in their own individual job search and career plan.

0101	Stefania Scandizzo **Meets August 31, 2020 - October 16, 2020** F 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion
0201	Stefania Scandizzo **Meets October 19, 2020 - December 14, 2020** F 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion

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ECON396 **Independent Honors Study**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BSOS-Economics department.

First semester of the departmental honors sequence. Students will develop and apply research skills required to carry out original research. By the end of the semester students will have produced a complete draft of an honors thesis resembling a scholarly journal article.

0101	Nuno Limao	Seats (Total: 15)
	TuTh 9:30am - 10:45am	ONLINE

ECON397 **Honors Thesis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON396. Restriction: Must be a candidate for honors in economics.

General supervision will be provided through assembled meetings with the professor in charge of the course.

Contact department for information to register for this course.

ECON398D **Topics in Economics; Origins and Use of Economic Data**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Prerequisite: Minimum grade of C- in ECON200 and ECON201; and 1 course with minimum grade of C- from (STAT100, ECON230, BMGT230, ECON321, STAT400, or other equivalent course). Restriction: Must be in one of the following programs (Economics Bachelor of Arts; Economics Bachelor of Science). Students will be exposed to the nature of data collection and data usage in the field of Economics. Students will learn the historical development of economic statistics and indicators along with introduction to survey methodology issues. Course will also emphasize ethical considerations of data collection and data use.

0101	Nicholas Montgomery	Seats (Total: 60)
	TuTh 9:30am - 10:45am	ONLINE

ECON398H **Topics in Economics; British Economy and Financial System**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Contact department for information to register for this course.

ECON398L **Topics in Economics; The British Economy and Financial Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Contact department for information to register for this course.

ECON399 **Independent Study in Economics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Integrated readings and independent study under direction and supervision of a faculty member. Contact department for additional information.

Permission of instructor must be arranged in advance. Open only to students who have previously earned 6 or more credits in upper division economics courses.

Contact department for information to register for this course.

ECON401 **Current Issues in American Economic Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON424, ECON422). Restriction: Must be in Economics Bachelor of Arts program.

Analysis of current economic problems and public policies. Topics could include poverty, income inequality, social insurance, education, environmental sustainability, immigration, and innovation. Other issues may be substituted depending on current events.

0101	Katharine Abraham	Seats (Total: 27)
	MW 9:00am - 10:15am	ONLINE

ECON402 **Macroeconomic Models and Forecasting**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Analysis of the fluctuations in economic activity and the formulation and use of forecasting models of the economy. Illustrations of computer macro models and forecasting problems.

0101	Sadik Aruoba	Seats (Total: 60)
	MW 2:00pm - 3:15pm	ONLINE

ECON406 **Advanced Microeconomics**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ECON326; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program.

Expands on the assumptions of rational decision-making used in intermediate microeconomics and develops more complicated, more realistic models which address uncertainty, intertemporal choices, strategic interactions, social preferences and considerations of what is fair.

0101	Erkut Ozbay	Seats (Total: 70)
	TuTh 11:00am - 12:15pm	ONLINE

ECON410 **Comparative Economic Institutions**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325 and ECON326; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program.

Institutions are the sets of rules that constrain the decisions and interactions of economic agents. The course uses economic analysis to understand both formal institutions (e.g. laws) and informal institutions (e.g. cultural norms). Practical examples are drawn from economics, law, and politics, and reflect the experience of many different countries.

0101	Peter Murrell	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

ECON412 **Economic History and Modern Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325 and ECON326. Restriction: Must be in Economics Bachelor of Science program.

Analysis of major economic, political, and social change in the developed world since 1800. This includes factors contributing to increases in economic performance, changes in the form of government, technological change (including industrialization), and integration and disintegration of the global economy. Emphasis is on institutional changes in how societies organize economic and political activities.

0101	Serguey Braguinsky MW 2:00pm - 3:15pm	Seats (Total: 40) ESJ 0224	

ECON414 Game Theory

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321, STAT400). Restriction: Must be in one of the following programs (Economics Bachelor of Arts; Economics Bachelor of Science). Credit only granted for: CMSC474, ECON414, GVPT399A or GVPT390.

Studies the competitive and cooperative behavior that results when several parties find that their individual outcomes are jointly determined. Students will learn how to use game theory to analyze situations of potential conflict. Applications are drawn from economics, business, and political science.

0101	Daniel Vincent TuTh 12:30pm - 1:45pm	Seats (Total: 40) ONLINE	
0201	Ece Yegane Class time/details on ELMs	Seats (Total: 40) ONLINE	
0301	Robert Schwab Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 43) ONLINE ONLINE	 Discussion
0302	Robert Schwab Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 43) ONLINE ONLINE	 Discussion

ECON416 Analysis of Economic Development

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325, ECON326, and ECON422. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON315 or ECON416.

Analysis of the determinants and influences on economic development. Emphasis on both theoretical models and econometric methods of explaining why some countries are poor, along with examination of policies to promote development.

0101	Sebastian Galiani MW 10:30am - 11:45am	Seats (Total: 40) ONLINE

ECON422 **Econometrics I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON325, ECON326); and 1 course with a minimum grade of C- from (STAT400, ECON321). Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON422, ECON424, or AREC422.

Emphasizes the interaction between economic problems and the assumptions employed in statistical theory. Formulation, estimation, and testing of economic models, including single variable and multiple variable regression techniques, theory of identification, and issues relating to inference.

0101	Alka Gandhi MWF 1:00pm - 1:50pm	Seats (Total: 40) ONLINE
0201	Ethan Kaplan MW 9:30am - 10:45am	Seats (Total: 40) ONLINE

ECON423 **Econometrics II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON422. Restriction: Must be in Economics Bachelor of Science program.

Interaction between economic problems and specification and estimation of econometric models. Topics include issues of autocorrelation, heteroscedasticity, functional form, simultaneous equation models, qualitative choice models, and other computational methods.

0101	Sergio Urzua MW 11:00am - 12:15pm	Seats (Total: 40) ONLINE

ECON424 **Applied Econometrics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON306, ECON325, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: ECON422, ECON424 or AREC422.

Provide the knowledge and skills necessary to accomplish and utilize basic applied econometric analysis utilized by many business service providers, government agencies, and nonprofits engaged in policy analysis. Topics include simple and multiple regressions using cross section, time series, and panel data, issues of heteroskedasticity, serial correlation, and multicollinearity, models with binary dependent variable, and program evaluation. Course emphasizes application of knowledge using software packages but still covers essential theoretical background.

0101	Hossein Abbasi Class time/details on ELMs	Seats (Total: 49) ONLINE
0201	Hossein Abbasi Class time/details on ELMs	Seats (Total: 49) ONLINE
0301	Cristina Riquelme MW 3:30pm - 4:45pm	Seats (Total: 40) ONLINE

ECON425 **Mathematical Economics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326). Restriction: Must be in Economics Bachelor of Arts program.

Covers mathematical tools and skills utilized in upper undergraduate and master's level coursework in Economics and Public Policy. Reviews calculus and math of finance and growth. Introduces techniques of optimization, linear algebra, and differential equations and connects them to micro and macro theory and applications. Topics will also include coverage of probability theory to explore how economists model uncertainty, as well as economic applications of integration.

Contact department for information to register for this course.

ECON426 **Economics of Cost-Benefit Analysis**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON306, ECON325, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Study of how to use cost benefit analysis and other similar tools of applied microeconomics to conduct policy analyses. Cost-benefit analysis is an empirical method of identifying an optimal choice from a set of policy alternatives, where optimal is defined in terms of economic efficiency. Real world examples are addressed, so that students understand limitations of the methods and also interactions of economic analysis with political and administrative processes.

0101	Alejandra Montoya Agudelo TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE

ECON451 **Public Choice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Analysis of collective decision making, economic models of government, program budgeting, and policy implementation; emphasis on models of public choice and institutions which affect decision making.

0101	Peter Coughlin MWF 12:00pm - 12:50pm	Seats (Total: 40) ONLINE
0201	Peter Coughlin MWF 1:00pm - 1:50pm	Seats (Total: 40) ONLINE

ECON453 **Natural Resources and Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AREC326, ECON306, or ECON326; and (BMGT230 or ECON230). Restriction: Must be in one of the following programs (Agricultural and Resource Economics; Agricultural and Resource Economics: Agribusiness; Agricultural and Resource Economics: Environmental and Resource Economics; Economics Bachelor of Arts; Environmental Science & Policy-Env Economics). Cross-listed with AREC453. Credit only granted for: AREC453 or ECON453.

Rational use and reuse of natural resources. Theory, methodology, and policies concerned with the allocation of natural resources among alternative uses. Optimum state of conservation, market failure, safe minimum standard, and cost-benefit analysis.

0101	Erik Lichtenberg TuTh 2:00pm - 3:15pm	Seats (Total: 80) ONLINE

ECON456 **Law and Economics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Relationship of the exchange process to the system of institutions and rules that society develops to carry out economic transactions. Topics covered include: Property rights; torts, negligence, and liability; contracts and exchanges; criminal control and enforcement; equity and efficiency issues .

0101	Aaron Finkle	Seats (Total: 80)
	MW 2:00pm - 3:15pm	ONLINE

ECON458J **Special Topics in Study Abroad IV; Topics in Econometrics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON471 **Labor Markets**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and minimum grade of C- in ECON424. Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: ECON470 or ECON471.

Central topics include the determinants of firms' demand for labor and households' decision making about whether to work, how much to work, and where to work. We will then study the equilibrium amount of labor hired in society and the wages paid to workers. The course will also include the measurement of the labor market, human capital, discrimination, incentives, and current changes in the American economic landscape. Various economic policies impacting labor markets will be analyzed.

Restriction: For ECON-BA (22040) majors only.

0101	Judith Hellerstein	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	ONLINE

ECON481 **Environmental Economics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (AREC326, ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, ECON321, BMGT230). Restriction: Must be in one of the following programs (Agricultural and Resource Economics; Agricultural and Resource Economics: Agribusiness; Environmental Science & Policy-Env Economics; Agricultural and Resource Economics: Environmental and Resource Economics; Economics Bachelor of Arts program). Cross-listed with: AREC481. Credit only granted for: ECON481 or AREC481.

An exploration of the use of economic incentives for protection of the environment and the determination of appropriate (or efficient) level of environmental quality. Also covers the choice of policy instruments for the attainment of environmental standards.

Contact department for information to register for this course.

ECON485 **Economics of Land Use**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (AREC326, ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, ECON321, BMGT230). Cross-listed with: AREC455. Credit only granted for: AREC455 or ECON485.

Fundamentals of location theory. Microeconomics of land use decisions, including determination of rent and hedonic pricing models. Impacts of government decisions on land use, including regulation (e.g., zoning), incentives (transferable development rights), provision of public services, and infrastructure investments. Impacts of land use on environmental quality, including issues relating to sprawl, agricultural land preservation, and other topics of special interest.

0101	David Newburn	Seats (Total: 80)
	TuTh 3:30pm - 4:45pm	ONLINE

ECON490 **Urban & Regional Economics: Issues and Policies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON321, BMGT230, ECON230). Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: ECON398I or ECON490. Formerly: ECON398I.

Exploration of urban and regional economics and policies, including economic forces leading to formation of city and regional networks. Conceptual and empirical analysis of policies affecting land use, housing, transportation and other aspects of sub-national economic development.

0101	Nicholas Montgomery	Seats (Total: 40)
	MW 9:00am - 10:15am	ONLINE

0201	Nicholas Montgomery MW 10:30am - 11:45am	Seats (Total: 40) ONLINE	

ECON499 **Independent Research in Economics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Directed research under the supervision of a faculty member. Contact department for additional information.

Contact department for information to register for this course.

ECON601 **Macroeconomic Analysis I**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of BSOS-Economics department.

Introductory technical treatment of standard Keynesian, classical and new classical macroeconomic models. Expectations formation and microeconomic foundations of consumption, investment, money demand, and labor market behavior.

0101	John Shea, Allan Drazen MW 9:30am - 10:45am Tu 8:00am - 9:15am	Seats (Total: 45) ONLINE ONLINE	 Discussion

ECON603 **Microeconomic Analysis I**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of BSOS-Economics department.

A detailed treatment of the theory of the consumer and of the firm, particularly emphasizing the duality approach. Topics include the household production model, imperfect competition, monopolistic and oligopolistic markets.

0101	Lawrence Ausubel, Emel Filiz Ozbay TuTh 10:00am - 11:15am F 9:30am - 10:45am	Seats (Total: 50) ONLINE ONLINE	 Discussion

ECON616 **Economic Development II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON615, ECON603, and ECON604; or permission of BSOS-Economics department.

Survey of a variety of models explaining how market failures may lead to poverty and underdevelopment, with an emphasis on the empirical evaluation of constraints faced by individuals in developing countries and the programs that attempt to alleviate those constraints. Topics include: agricultural and land markets, labor markets, human capital in developing countries, credit markets, and consumption smoothing and risk coping.

0101	Jessica Goldberg	Seats (Total: 30)	
	MW 2:00pm - 3:15pm	ONLINE	

ECON623 **Econometrics I**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have advanced knowledge of probability, statistics, and linear algebra. Restriction: Permission of BSOS-Economics department.

Specification, estimation, hypothesis testing and prediction in the classical and generalized linear regression model. Topics include: ordinary least squares, generalized least squares, instrumental variableestimation, quantile regression, finite and large sample analysis and general testing principles including misspecification tests. The course will also provide instructions on the use of a major statistical packagesuch as Stata or TSP.

0101	Guido Kuersteiner	Seats (Total: 41)	
	TuTh 11:20am - 12:45pm	ONLINE	
	F 11:00am - 12:30pm	ONLINE	Discussion

ECON626 **Empirical Microeconomics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON624. Restriction: Must be in Economics (Doctoral) program.

To provide students with the opportunity to use empirical techniques that are particularly valuable in the analysis of microeconomic data. Topics include panel data, nonlinear optimization, limited dependent variables, truncated, censored, selected samples, the analysis of natural experiments, and quantile regressions. This course will emphasize hands-on practical experience.

0101	Guido Kuersteiner	Seats (Total: 23)	
	F 2:00pm - 4:30pm	ONLINE	

ECON630 **Computational Methods in Macroeconomics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON602 and ECON601. Restriction: Must be in one of the following programs (Economics (Master's); Economics (Doctoral)) ; or permission of BSOS-Economics department.

Essential computational methods used in macroeconomics. There will be particular focus on approximating the solution to dynamic stochastic general equilibrium models. Methods for representative-agent and heterogeneous-agent models will be extensively studied. Econometric methods such as Generalized Method of Moments, Maximum Likelihood, Vector Autoregressions wil also be covered.

0101	Sadik Aruoba	Seats (Total: 16)
	MW 11:00am - 12:15pm	ONLINE

ECON637 **Decision Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603 and ECON604. Restriction: Must be in the Economics program; or must have completed ECON603 and ECON604 with a letter grade of B+ or better. Credit only granted for: ECON698B or ECON637. Formerly: ECON698B.

Decision making is a process in which we select a course of action among available options. This course will explore the various behavioral biases observed in decision making processes by adjusting our normative theories to capture these biases.

0101	Yusuf Masatlioglu	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

ECON641 **Microeconomic Analysis**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in M.Prof.Studies: Applied Economics program; or permission of BSOS-Economics department. Credit only granted for: ECON641 or ECON506. Formerly: ECON506.

Microeconomic analysis applied to public policy problems with an emphasis on practical examples and how they illustrate microeconomic theories. Policy issues such as pollution, welfare and income distribution, market design, industry regulation, price controls, tax policy and health insurance are practical examples used to illustrate the abstract principles of microeconomics.

PR01	Lucas Goodman **Meets August 31, 2020 - November 20, 2020** Tu 6:45pm - 9:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE	 Discussion
	Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.		
PR02	Paul Zimmerman **Meets August 31, 2020 - November 20, 2020** Th 6:45pm - 9:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE	 Discussion
	Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.		
PWE1	Aaron Finkle W 7:00pm - 9:45pm Class time/details on ELMs	Seats (Total: 30) ONLINE ONLINE	 Discussion
	Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.		

ECON642 **Topics in Applied Macroeconomics**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in M.Prof.Studies: Applied Economics program; or permission of BSOS-Economics department.

Focus is on applied macroeconomic models used by federal agencies to explain and predict economic behavior. Course emphasizes macroeconomic data: NIPA accounts, GDP, construction and application of CPI, labor force data and economic indicators. Students will also study a selected set of current macroeconomic topics including models of economic growth, economic fluctuations, monetary policy, inflation and financial markets.

PWE1	Arto Kovanen M 6:30pm - 9:15pm Class time/details on ELMs	Seats (Total: 30) ONLINE ONLINE	 Discussion
	Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.		

ECON643 **Empirical Analysis I: Foundations of Empirical Research**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ECON643 or ECON521. Formerly: ECON521.

Fundamental aspects of data management and interpretation emphasizing sampling, descriptive statistics, index numbers and construction of aggregated variables. Students will learn probability theory, confidence intervals, hypothesis testing and regression analysis using the EXCEL spreadsheet program and STATA statistical software.

PR01	John Hao	Seats (Total: 25)	
	Meets August 31, 2020 - November 20, 2020		
	M 6:45pm - 9:30pm Class time/details on ELMs	ONLINE ONLINE	 Discussion
	Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.		
PR02	John Hao	Seats (Total: 25)	
	Meets August 31, 2020 - November 20, 2020		
	W 6:45pm - 9:30pm Class time/details on ELMs	ONLINE ONLINE	 Discussion
	Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.		
PWE1	John Straub, Ye Zhang	Seats (Total: 30)	
	Tu 6:30pm - 9:15pm Class time/details on ELMs	ONLINE ONLINE	 Discussion
	Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.		

ECON645 **Empirical Analysis III: Econometric Modeling and Forecasting**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON644. Credit only granted for: ECON645 or ECON523. Formerly: ECON523.

Study of empirical techniques that are particularly relevant to the analysis of microeconomic models. Emphasis is on advanced panel data methods, time series regressions, instrumental variables, limited dependent variables, and sample selection corrections.

PR01	Moises Yi **Meets August 31, 2020 - November 20, 2020** M 6:45pm - 9:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE	 Discussion
	Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.		
PWE1	Ye Zhang Tu 6:30pm - 9:15pm Class time/details on ELMs	Seats (Total: 27) ONLINE ONLINE	 Discussion
	Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.		

ECON664 **Empirical Studies in Industrial Organization**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603, ECON604, and ECON624. Credit only granted for: ECON664 or ECON698J. Formerly: ECON698J.

Review recent empirical literature in industrial organization. Covers price discrimination, cartel and collusion, entry and market structure, information and competition, technological change and adoption, auction, and firm organization.

0101	Ginger Jin MW 11:00am - 12:15pm	Seats (Total: 20) ONLINE

ECON670 **Financial Economics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON644. Restriction: Must be in M.Prof.Studies: Applied Economics program.

The course applies microeconomic theory and applied econometric techniques to the study of financial institutions and markets for financial assets. Students will learn how economists model and estimate the value of financial assets. The economic and empirical models are of interest to public policy makers and private wealth managers. Specific topics can include financial intermediation, the regulation of financial institutions, risk management, portfolio theory, the capital asset pricing model and the efficient markets hypothesis.

PR01	Ilknur Zer Boudet	Seats (Total: 23)	
	Meets August 31, 2020 - November 20, 2020		
	W 6:45pm - 9:30pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.		

ECON673 **Information, Game Theory and Market Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON644.

A study of the strategic decision-making and the theory and practice of market design. Focus is on the design of organized market and incentives created by market rules. Topics include online auction markets, government auctions procurement auctions and matching markets. The analysis includes documenting the rules of real-world markets, game theoretic analysis, empirical analysis, and experimental work.

PR01	David Ovadia	Seats (Total: 23)	
	Meets August 31, 2020 - November 20, 2020		
	Tu 6:45pm - 9:30pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.		

ECON675 **Environmental Economics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON645.

A study of the nature of environmental regulation focusing on U.S. environmental policies and policy debates.

PWE1	Hong Kim	Seats (Total: 27)	
	M 6:30pm - 9:15pm Class time/details on ELMs	ONLINE ONLINE	Discussion
	Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.		

ECON683 **International Macroeconomics and Finance**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON641 and ECON642; and must have completed or be concurrently enrolled in ECON644. Restriction: Must be in M.Prof.Studies: Applied Economics program.

Economic analysis of international macroeconomic issues and policy. Topics can include the study of exchange rates, balance of payments, international financial markets, international business cycles, contagion, and the roles played by international economic institutions.

PR01	Mita Chakraborty	Seats (Total: 23)	
	Meets August 31, 2020 - November 20, 2020		
	Th 6:45pm - 9:30pm Class time/details on ELMs	ONLINE ONLINE	Discussion
	Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.		
PWE1	Mahsa Agha Gholizadeh	Seats (Total: 27)	
	Th 7:00pm - 9:45pm Class time/details on ELMs	ONLINE ONLINE	Discussion
	Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.		

ECON698 **Selected Topics in Economics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

ECON701 **Advanced Macroeconomics I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON602 and ECON601.

Recent developments in macroeconomics with an emphasis on topics and techniques useful for conducting research in macroeconomics. Topics include advanced treatment of fiscal and monetary policy issues; the role of imperfect competition; real, sectoral and nominal business cycle models.

0101	John Haltiwanger MW 2:00pm - 3:15pm	Seats (Total: 25) ONLINE

ECON708 **Advanced Topics in Applied and Theoretical Microeconomics**

(Perm req)

Credits: 2 Grading Method: Sat-Fail, Audit

Read, discuss, and analyze current topics in microeconomics, including public economics, environmental economics, labor economics, industrial economics, microeconomic theory, public choice and international trade. Specific topics covered will change from semester to semester depending on the students' and faculty's interests. Intended primarily for students beginning thesis research in economics.

0601	Ginger Jin MW 12:30pm - 1:45pm	Seats (Total: 5) ONLINE
2901	Guido Kuersteiner MW 12:30pm - 1:45pm	Seats (Total: 5) ONLINE
4401	Daniel Vincent MW 12:30pm - 1:45pm	Seats (Total: 5) ONLINE
5501	Maureen Cropper MW 12:30pm - 1:45pm	Seats (Total: 5) ONLINE

ECON709 **Advanced Topics in Applied and Theoretical Macroeconomics**

(Perm req)

Credits: 2 Grading Method: Sat-Fail, Audit

Read, discuss, and analyze current topics in macroeconomics, including asset pricing models, models of economic growth, investment, and the labor market. Specific topics covered will change from semester to semester depending on the students' and faculty's interests. Intended primarily for students beginning thesis research in economics.

0101	Allan Drazen TuTh 12:30pm - 1:45pm	Seats (Total: 5) ONLINE

0301	Pierre De Leo TuTh 12:30pm - 1:45pm	Seats (Total: 5) ONLINE
0401	Thomas Drechsel TuTh 12:30pm - 1:45pm	Seats (Total: 5) ONLINE
4101	Eunhee Lee TuTh 12:30pm - 1:45pm	Seats (Total: 5) ONLINE

ECON721 **Econometrics III**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON624; or permission of BSOS-Economics department.

Oriented towards macro-econometric methods. Topics covered will be selected from the following: Further discussion of topics covered in ECON624, nonlinear time series models, exogeneity and causality, non-stationary time series models (unit roots, co-integration, error correction models, vector autoregressive models), econometric models of volatility (ARCH and GARCH models, and Stochastic volatility models), rational expectations models, non-stationary panel data models, tests for structural change, Bayesian econometrics and methods for Bayesian computation.

0101	John Chao TuTh 5:00pm - 6:15pm	Seats (Total: 20) ONLINE

ECON741 **Advanced International Economics I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON601; or permission of BSOS-Economics department.

Exchange rate determination; exchange rate regimes; international monetary reform; policy conflict and cooperation; the LDC debt problem; pricing of international assets; balance of payments crises.

0101	Pierre De Leo TuTh 9:30am - 10:45am	Seats (Total: 16) ONLINE

ECON742 **Advanced International Economics II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603; or permission of BSOS-Economics department.

Comparative advantage, Heckscher-Ohlin theory, specific-factors model, empirical verification, economies of scale, imperfect competition, commercial policy, factor mobility.

0101	Nuno Limao	Seats (Total: 9)
	TuTh 11:00am - 12:15pm	ONLINE

ECON754 **Topics in Political Economy I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON602 and ECON604; or permission of BSOS-Economics department.

Study of political determinants of macroeconomic outcomes. Time inconsistency in monetary and fiscal policy, political business cycles. Political models of redistribution, delay in reform, transition, growth, and international policymaking.

0101	Allan Drazen	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

ECON771 **Advanced Labor Economics: Theory and Evidence**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603 and ECON624; or permission of BSOS-Economics department. Restriction: Must be in the Economics Doctoral program.

Modern analytical and quantitative labor economics. Labor supply decisions of individuals and households; human capital model and distribution of income. Demand for labor; marginal productivity theory, imperfect information and screening. Interaction of labor demand and supply; unemployment; relative and absolute wages; macroeconomic aspects of the labor market.

0101	Sergio Urzua	Seats (Total: 10)
	MW 9:00am - 10:15am	ONLINE

ECON785 **Advanced Economics of Natural Resources**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603, ECON604, and ECON624.

The use of exhaustible and renewable natural resources from normative and positive points of view. Analysis of dynamic resource problems emphasizing energy, mineral, groundwater, forestry, and fishery resources; optimal, equilibrium, and intergenerational models of resource allocation.

Cross-listed with AREC785. Credit will be granted for one of the following: AREC785 or ECON785.

0101	James Archsmith TuTh 12:30pm - 1:45pm	Seats (Total: 28) ONLINE

ECON799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ECON808 **Workshop on Macroeconomics, International Macroeconomics and International Finance; Workshop in Applied Economics**

Credits: 2 Grading Method: Sat-Fail, Audit

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0101	Allan Drazen W 3:30pm - 5:30pm	Seats (Total: 10) ONLINE
0102	Thomas Drechsel W 3:30pm - 5:30pm	Seats (Total: 10) ONLINE

ECON828 **Workshop in Econometrics**

Credits: 2 Grading Method: Sat-Fail, Audit

Current research in econometrics. Topics drawn from theoretical and applied econometrics. Special topics include: maximum likelihood and generalized method of moments estimation of linear and non-linear models, analysis of stationary and non-stationary time series, cross section time series estimation, spatial estimation mehtods, Bayesian methods, semi-and non-parametic methods, rational expectations models, numerical methods, and various applications.

0101	John Chao M 3:30pm - 5:00pm	Seats (Total: 20) ONLINE

ECON848 **Workshop in International Trade, Institutional Economics and Political Economy**

Credits: 2 Grading Method: Sat-Fail, Audit

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0101	Peter Murrell M 3:30pm - 5:30pm	Seats (Total: 20) ONLINE

ECON868 **Workshop in Industrial Organization, Microeconomic Theory and Behavioral and Experimental Economics**

Credits: 2 Grading Method: Sat-Fail, Audit

Workshops designed to provide a structured environment for our faculty and graduate students to meet regularly to discuss and present their research ideas.

0101	Ginger Jin Tu 3:30pm - 5:30pm	Seats (Total: 20) ONLINE
0102	Daniel Vincent Tu 3:30pm - 5:30pm	Seats (Total: 20) ONLINE

ECON878 **Workshop in Development, Labor and Public Economics**

Credits: 2 Grading Method: Sat-Fail, Audit

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0101	Maureen Cropper Th 3:30pm - 5:30pm	Seats (Total: 10) ONLINE
0102	Sebastian Galiani Th 3:30pm - 5:30pm	Seats (Total: 10) ONLINE

ECON898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Sat-Fail

Contact department for information to register for this course.

ECON899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

EDCP Education Counseling and Personnel Services Fall 2020

EDCP104 **Diversity Exploration and Academic Strategies**

Credits: 1 Grading Method: Regular

Restriction: Enrollment is for first-year students enrolled in the College Success Scholars program. Additional information: Enrollment is for first-year students enrolled in the College Success Scholars program.

Designed to assist first semester students enrolled in the College Success Scholars program through an introduction to the academic environment, acclimation of campus resources, assistance in skill development and academic strategies, appreciation of cultural diversity as well as awareness of social identities for achieving positive personal, academic and professional outcomes.

0101	Christopher Lester	Seats (Total: 50)
	W 6:00pm - 7:50pm	ONLINE

EDCP108C **College and Career Advancement: Concepts and Skills; Career Clarification - Choosing a Major**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Knowledge and skills designed to enhance college as a learning experience or preparation for life.

FCW1	Sarah Wolek	Seats (Total: 30)
	Meets October 19, 2020 - December 14, 2020	
	Class time/details on ELMs	ONLINE
	Restricted to students in Freshmen Connection.	

EDCP108I **College and Career Advancement: Concepts and Skills; Academic Transitions to Internships**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Knowledge and skills designed to enhance college as a learning experience or preparation for life.

Restricted to students with less than 105 cumulative credits. Recommended for students who have never had an internship and are actively searching for one. Students participating in this course will engage in the full experience of searching for an internship Course registration is closed to graduating seniors.

0101	Erin Callahan	Seats (Total: 30)
	Meets August 31, 2020 - October 16, 2020	
	Class time/details on ELMs	ONLINE

0201	Erin Rooney-Eckel **Meets August 31, 2020 - October 16, 2020** Class time/details on ELMs	Seats (Total: 30) ONLINE
0301	Erin Rooney-Eckel **Meets October 26, 2020 - December 12, 2020** Class time/details on ELMs	Seats (Total: 30) ONLINE
0401	Erin Rooney-Eckel **Meets October 26, 2020 - December 12, 2020** Class time/details on ELMs	Seats (Total: 30) ONLINE
0701	Erin Rooney-Eckel **Meets October 26, 2020 - December 12, 2020** Class time/details on ELMs *This section is restricted to CMNS students only.*	Seats (Total: 30) ONLINE
0801	Erin Rooney-Eckel **Meets August 31, 2020 - October 16, 2020** Class time/details on ELMs *Restricted to CIVICUS students only.*	Seats (Total: 30) ONLINE

EDCP210 **Peer Counseling Skills and Mental Health Advocacy**

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed EDCP310; and must not have completed PSYC433. Credit only granted for: EDCP210, EDCP310, or PSYC433.

Introduction to core helping skills in peer counseling settings and three predominant theoretical approaches used in the counseling field (humanistic, psychodynamic, cognitive-behavioral). The course also explores mental health stigma and advocacy. Students will build an understanding of the practical application of underlying principles and theory in counseling and the helping professions, while exploring their own, and societal, biases, assumptions, and attitudes toward mental health.

0101	Emily Cygrymus MW 11:00am - 12:15pm	Seats (Total: 18) ONLINE

0201	Xinyi Zhang TuTh 2:00pm - 3:15pm	Seats (Total: 18) ONLINE
0301	Shanyun Zheng TuTh 2:00pm - 3:15pm	Seats (Total: 18) ONLINE
0401	Shannon Martin MW 1:00pm - 2:15pm	Seats (Total: 18) ONLINE
0501	Shereen Ashai TuTh 11:00am - 12:15pm	Seats (Total: 18) ONLINE
0701	Mira An MW 10:00am - 11:15am	Seats (Total: 18) ONLINE

EDCP298 **Special Problems in Counseling and Personnel Services**

Credits: 1-3 Grading Method: Regular, Pass-Fail

Individual instruction in special problems related to counseling, student leadership, and college student development.

Contact department for information to register for this course.

EDCP298Z **Special Problems in Counseling and Personnel Services; British Life and Society in a Cross-Cultural Context**

Credits: 3 Grading Method: Regular, Pass-Fail

Individual instruction in special problems related to counseling, student leadership, and college student development.

Contact department for information to register for this course.

EDCP386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department; and sophomore standing or higher.

Special EDCP form required.

Contact department for information to register for this course.

EDCP489 **Field Experiences in Counseling and Personnel Services**

(Perm req)

Credits: 1-4 Grading Method: Regular General Education: DVUP

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Contact department for information to register for this course.

EDCP498 **Special Problems in Counseling and Personnel Services**

(Perm req)

Credits: 1-3 Grading Method: Regular

Available only to major students who have formal plans for individual study of approved problems.

Contact department for information to register for this course.

EDCP610 **Professional Orientation**

Credits: 3 Grading Method: Regular, Audit

Survey of knowledge base and practices in counseling and personnel services specializations, professional ethics, credentialling relevant legislation, current issues.

For Student Affairs students only.

0101	Michelle Espino Tu 1:00pm - 3:45pm *Restricted to Student Affairs Concentration masters students.*	Seats (Total: 15) ONLINE
0201	Natasha Mitchell M 4:15pm - 7:00pm *Limited to School Counseling Students.*	Seats (Total: 20) ONLINE

EDCP614 **Counseling Skills: Introduction to Practicum**

Credits: 3 Grading Method: Regular, Audit

Corequisite: EDCP616.

Development and utilization of counseling skills.

0101	Robert Lent Tu 1:00pm - 3:50pm	Seats (Total: 35) ONLINE

EDCP615 **Counseling I: Appraisal**

Credits: 3 Grading Method: Regular, Audit

Corequisite: EDCP618. Restriction: Must be in a major within EDUC-Counseling, Higher Education and Special Education department.

Collection and interpretation of appraisal data, synthesis of data through case study procedures. Development of interview skills.

0101	Ellen Fabian	Seats (Total: 11)
	Th 4:15pm - 7:00pm	ONLINE

EDCP616 **Counseling II: Theory and Practice**

Credits: 3 Grading Method: Regular, Audit

Corequisite: EDCP614.

Counseling theories and the practices which stem from such theories.

For EDCP majors only.

0101	Lisa Connors	Seats (Total: 26)
	Tu 4:15pm - 7:00pm	ONLINE
	Limited to Students in the Masters Program.	

EDCP617 **Group Counseling**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCP616.

A survey of theory, research and practice of group counseling and psychotherapy, with an introduction to growth groups and the laboratory approach, therapeutic factors in groups, composition of therapeutic groups, problem clients, therapeutic techniques, research methods, theories, ethics and training of group counselors and therapists.

0101	Cixin Wang	Seats (Total: 10)
	M 9:45am - 12:30pm	ONLINE

EDCP619B **Practicum in Counseling**

Credits: 3

Grading Method: Regular, Audit

Sequence of supervised counseling experiences of increasing complexity. Limited to eight applicants in advance. Two hours class plus laboratory.

0101	Noah Collins	Seats (Total: 4)	
	Th 1:00pm - 3:45pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

Restricted to second-year Student Affairs masters students approved for Counseling Practicum participation.

EDCP622 **Human Development in the Counseling Context**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: EDCP789X or EDCP622. Formerly: EDCP789X.

An examination of the development of individuals over the lifespan. A focus on human development theories and the ways in which those theories are utilized within the counseling process to promote optimal development of individuals and families across the lifespan.

0101	Paul Gold	Seats (Total: 20)
	Th 4:15pm - 7:00pm	ONLINE

EDCP635 **School Consultation I**

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in the School Counseling program; or must be in the School Psychology program; or permission of instructor.

Theory and practice of consultation services in the school setting. Understanding of school culture. Introduction to problem solving model of case consultation for assessment and remediation of learning and behavior problems in the classroom. Practicum experience.

0101	Colleen O'Neal	Seats (Total: 10)
	M 9:00am - 11:45am	ONLINE

EDCP640 **School Psychology Seminar: Overview of the Specialty**

Credits: 1-2

Grading Method: Regular, Audit

Restriction: Must be in the School Psychology program; or permission of instructor.

Overviews the specialty of school psychology, including history of the specialty, roles and functions of school psychologists, and current professional issues related to the specialty.

0101	William Strein	Seats (Total: 10)
	M 1:00pm - 2:45pm	ONLINE

EDCP641 **School Psychology Seminar: Professional Ethics**

Credits: 1-2 Grading Method: Regular, Audit

Restriction: Must be in the School Psychology program; or permission of instructor.

Overviews ethical issues in the specialty of school psychology.

0101	William Strein	Seats (Total: 10)
	M 2:45pm - 4:00pm	ONLINE

EDCP652 **Research in Counseling**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the School Counseling program. Credit only granted for: EDCP652 or EDCP789Y. Formerly: EDCP789Y.

An exploration of basic and applied research, program evaluation, and associated measurement and evaluation skills crucial for professional school counselors.

0101	Paul Gold	Seats (Total: 15)
	W 4:15pm - 7:00pm	ONLINE

EDCP685 **Counseling Psychology Didactic Practicum in Counseling Supervision**

Credits: 3 Grading Method: Sat-Fail

Prerequisite: For Counseling Psychology majors only. Cross-listed with PSYC685. Formerly: EDCP745.

In depth examinatin of theories and techniques of counseling supervision, supervised experience in the process of supervising counselors.

0101	Mary Ann Hoffman	Seats (Total: 10)
	W 11:00am - 1:45pm	ONLINE

EDCP695 **Ethical and Professional Issues in Counseling Psychology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must be in the Counseling Psychology program. Also offered as: PSYC695. Credit only granted for: EDCP669, EDCP688, EDCP695, PSYC688, or PSYC695. Formerly: EDCP669 and EDCP688.

Exploration of ethical and professional issues in Counseling Psychology.

0101	Roger Worthington	Seats (Total: 10)
	Tu 11:00am - 2:00pm	ONLINE

EDCP697 **Multicultural Issues in Counseling Psychology**

Credits: 3 Grading Method: Regular

Prerequisite: Only open to Counseling Psychology majors. Credit only granted for: EDCP697, EDCP699, or PSYC697. Formerly: EDCP699.

Exploration of knowledge, attitudes and skills for providing counseling and psychological services to culturally diverse populations.

0101	Richard Shin	Seats (Total: 15)
	W 2:00pm - 5:00pm	ONLINE

EDCP698 **Advanced Didactic Practicum in Counseling Psychology**

Credits: 3 Grading Method: Regular, Audit

In depth examination of approaches to or theories abouth intervention, and supervised experience in the application of those approaches or theories. Each practicum focuses on a particular approach, e.g., psychodynamic, cognitive-behavioral, cross-cultural.

0101	Kristen Pinto-Coelho	Seats (Total: 10)
	TuTh 9:30am - 10:50am	ONLINE
	Limited to Counseling Psychology Students	

EDCP738 **Practicum in Child Assessment**

Credits: 3 Grading Method: Regular, Audit

Administration of complete test batteries to children; supervision of initial interviews; test administration and scoring; interpretation and synthesis of test battery and interview material; the psychological report; verbal interpretation of test results; and recommendations. Taken initially with EDCP 633; repeated with EDCP 634 in the subsequent semester.

0101	Jill Jacobson, Kristi Maslak	Seats (Total: 7)
	Tu 9:00am - 12:15pm	ONLINE

EDCP741 **Multicultural Practice in Student Affairs: Self, Education, and Society**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCP771. Credit only granted for: EDCP741 or EDCP789Z. Formerly: EDCP789Z.

Develop knowledge and skills in the area of multicultural practice in student affairs through the examination of oppression, power, and privilege and how these dynamics impact individuals, educational institutions, and societies.

0101	Bridget Kelly	Seats (Total: 20)
	Th 4:15pm - 7:00pm	ONLINE

EDCP743 **Developmental Psychopathology**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Counseling and Personnel Services (Doctoral) program; or permission of instructor. Credit only granted for: EDCP789Q or EDCP743. Formerly: EDCP789Q.

Explore psychopathology from a developmental perspective and with an emphasis on affective bases of behavior

0101	Hedwig Teglasi	Seats (Total: 10)
	W 9:30am - 12:15pm	ONLINE

EDCP746 **Clinical Supervision of Pupil Personnel Services**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Advanced Doctoral Students Only. Restriction: Permission of instructor.

Supervision of role of psychologists and counselors in school settings; applied skills in supervision of services.

0101	Cixin Wang W 9:45am - 12:30pm	Seats (Total: 10) ONLINE

EDCP772 **Research in Student Affairs**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCP656; or permission of instructor. Restriction: Must be in the College Student Personnel program.

Research designs and approaches to research in student development and higher education. Development of research for research competency or dissertation proposal.

0101	Marvette Lacy Th 9:00am - 11:45am	Seats (Total: 14) ONLINE

EDCP775 **Facilitating Student Learning in Higher Education**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCP771; or permission of EDUC-Counseling, Higher Education and Special Education department. Restriction: Must be in Counseling and Personnel Services (Doctoral) program.

Application of selected models of college student development, learning styles, and related models of instruction to the assessment of characteristics and the design of learning environments.

0101	Michael Goodman Th 9:00am - 11:45am Class time/details on ELMs	Seats (Total: 20) ESJ 1224 ONLINE

EDCP789R **Advanced Topics in Counseling and Personnel Services; College Teaching Seminar**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

0101	Michelle Espino Contact instructor or department for details.	Seats (Total: 5)
5101	Candace Moore Contact instructor or department for details.	Seats (Total: 2)

EDCP798 **Special Problems in Counseling and Personnel Services**

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

Master's AGS, or doctoral candidates who desire to pursue special research problems under the direction of their advisers may register for credit under this number.

Contact department for information to register for this course.

EDCP798A **Special Problems in Counseling and Personnel Services; Research Design and Proposal Writing Seminar**

Credits: 3

Grading Method: Regular, Audit

Master's AGS, or doctoral candidates who desire to pursue special research problems under the direction of their advisers may register for credit under this number.

0101	Michelle Espino	Seats (Total: 10)
	Th 9:00am - 11:45am	ONLINE

EDCP799 **Master's Thesis Research**

Credits: 1-6

Grading Method: Sat-Fail

Registration required to the extent of six hours for Master's thesis.

Contact department for information to register for this course.

EDCP799A **Master's Thesis Research; Research Design and Proposal Writing Seminar**

Credits: 1-6

Grading Method: Sat-Fail

Registration required to the extent of six hours for Master's thesis.

0101	Michelle Espino	Seats (Total: 10)
	Th 9:00am - 11:45am	ONLINE

EDCP870 **Professional Issues Seminar**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: EDCP656 or EDCP870. Formerly: EDCP656.

Examination of issues that bear on professional issues such as ethics, inter-professional relationships and research.

0101	Candace Moore	Seats (Total: 12)
	Tu 4:30pm - 7:30pm	ONLINE

EDCP879 **Internship in School Counseling**

Credits: 4-8 Grading Method: Regular, Audit, Sat-Fail

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Jessica McKechnie M 7:00pm - 9:45pm	Seats (Total: 15) ONLINE

EDCP888 **Apprenticeship in Counseling and Personnel Services**

(Perm req)

Credits: 1-8 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

Contact department for information to register for this course.

EDCP888A **Apprenticeship in Counseling and Personnel Services; College Student Personnel**

Credits: 3 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Marsha Guenzler-Stevens, Kristan Skendall Contact instructor or department for details.	Seats (Total: 10)

EDCP888C **Apprenticeship in Counseling and Personnel Services; School Psychology**

Credits: 1-8 Grading Method: Regular

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Hedwig Teglasi W 4:45pm - 7:30pm	Seats (Total: 15) ONLINE

0201	Hedwig Teglasi	Seats (Total: 15)
	Contact instructor or department for details.	

EDCP889 **Internship in Counseling and Personnel Services; Internship in Counseling and Personnel Services**

Credits: 1-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

EDCP898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDCP899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Registration required to the extent of 12-18 hours for a Ph.D. Dissertation.

Contact department for information to register for this course.

EDHD Education, Human Development Fall 2020

EDHD200 **Paradigms and Perspectives in Human Development**

Credits: 3 Grading Method: Regular

Restriction: Must have 45 or fewer credits; or must be in the Human Development program or Human Development minor.

An introduction to the paradigms and perspectives that guide the study of human development across the lifespan in cognitive, social, physical and emotional domains. Topics of study include overlying principles, concepts, assumptions, theoretical frameworks, and research methods that influence ways in which development is conceptualized. The course is designed to provide insight into major questions of the day in human development and how these prevailing perspectives have evolved over time. This course will also help students understand how knowledge of theory and research is translated into practice in a variety of professional settings.

0101	Lucas Butler	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	ONLINE

0201	Lucas Butler TuTh 3:30pm - 4:45pm	Seats (Total: 40) ONLINE	

EDHD201 **Learning How to Learn**

Credits: 3 Grading Method: Regular General Education: DSHS

Immerses students in the theoretical and empirical study of learning by engaging them in orchestrated experiences and activities drawn directly from the disciplinary research. Students achieve deep understanding of their own learning, as well as the means of enhancing that learning both in school and out-of-school contexts.

0101	Patricia Alexander MW 11:00am - 11:50am M 12:00pm - 12:50pm	Seats (Total: 25) ESJ 0202 ONLINE	Lab
	Alternating face-to-face/online meeting. See instructor for details.		
0102	Patricia Alexander MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 25) ESJ 0202 ONLINE	Lab
	Alternating face-to-face/online meeting. See instructor for details.		
0103	Patricia Alexander MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 25) ESJ 0202 ONLINE	Lab
	Alternating face-to-face/online meeting. See instructor for details.		
0104	Patricia Alexander MW 11:00am - 11:50am M 1:00pm - 1:50pm	Seats (Total: 25) ESJ 0202 ONLINE	Lab
	Alternating face-to-face/online meeting. See instructor for details.		
0201	Julianne Van Meerten TuTh 9:30am - 10:45am	Seats (Total: 40) ONLINE	
0301	Eric Schoute TuTh 11:00am - 12:15pm	Seats (Total: 40) ONLINE	
FC01	Lauren Trakhman TuTh 4:30pm - 5:45pm	Seats (Total: 25) ONLINE	
	Restricted to students in Freshmen Connection.		

EDHD210 **Foundations of Early Childhood Education**

(Perm req)

Credits: 3 Grading Method: Regular CORE: HO General Education: DSHS

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

Students explore historical and current research in early childhood education, primary models of curriculum and pedagogy in the field, and the relationship between critical aspects of young children's development and the creation of inclusive learning opportunities for all children, including children at risk. The concept of developmentally appropriate practice and its application across different developmental levels and early childhood classrooms will be introduced and connected with discussion in EDHD220 and EDSP211. Students examine issues in developing and implementing high quality early childhood education experiences for young children with and without disabilities, including the influence of family, culture, and community, the needs of children at risk (e.g., poverty, immigrant status, English Language Learners), and the role of assessment in early learning.

0101	Elisa Klein	Seats (Total: 25)	
	Th 1:00pm - 3:45pm	ONLINE	

EDHD220 **Exploring Early Childhood General and Special Education**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

Students who are considering a career in education will consider information about the teaching profession. Students reflect on their personal strengths, identify areas of growth, and examine their predisposition to work with young children with and without disabilities. They will discuss the nature of teaching, the moral and philosophic underpinnings that influenced their decision to enter into the teaching professions, as well as the roles and responsibilities of teachers and the characteristics and qualities for effective teachers (teaching styles and teacher's primary role in the classroom).

0101	Renee Garraway	Seats (Total: 6)	
	Tu 2:00pm - 4:00pm	ONLINE	
	M 8:00am - 12:00pm	ONLINE	Lab
0102	Renee Garraway	Seats (Total: 7)	
	Tu 2:00pm - 4:00pm	ONLINE	
	Tu 8:00am - 12:00pm	ONLINE	Lab
0103	Renee Garraway	Seats (Total: 6)	
	Tu 2:00pm - 4:00pm	ONLINE	
	Th 8:00am - 12:00pm	ONLINE	Lab

0104	Renee Garraway	Seats (Total: 5)	
	Tu 2:00pm - 4:00pm	ONLINE	
	F 8:00am - 12:00pm	ONLINE	Lab

EDHD221 **Aggression and Violence in Everyday Life: Can Violence Be Prevented?**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

History of aggression and violence in the world and in the United States. Examines the extent to which various forms are prevalent today and scientifically supported prevention strategies. Methods of studying aggression are reviewed, as are theories and methods of preventing aggression and violence.

0101	Lauren Trakhman	Seats (Total: 50)
	Tu 9:30am - 12:15pm	ONLINE

EDHD228 **Research Experiences in Human Development**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Provides students with hands-on participation in faculty-supervised laboratory research activities in the Department of Human Development & Quantitative Methodology. Students will learn about the purpose of scientific research and engage in activities that advance their knowledge and skills with regard to its ethical practice.

Contact department for information to register for this course.

EDHD230 **Human Development and Societal Institutions**

Credits: 3 Grading Method: Regular CORE: SB, D General Education: DSHS, DVUP

Development of the individual in the context of relationships with the formal and informal institutions of society. An examination of various aspects of development from the broad perspective of the social sciences.

0101	Doireann Renzi	Seats (Total: 40)
	MW 2:00pm - 3:15pm	ONLINE

EDHD231 **Inside 21st Century Creativity: How Creative Ideas, Concepts, and Products are Generated**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Mechanisms of the creative mind. Psychological, social, sociological, developmental, cultural, educational, genetic and neural based roots of creativity.

0101	Alexis Williams	Seats (Total: 50)
	TuTh 9:30am - 10:45am	ONLINE

EDHD306 **Research Methods in Human Development**

Credits: 3 Grading Method: Regular General Education: FSAR

Addresses the scientific concepts and principles central to the study of human behavior and development. Students will learn about basic research methods in studying human behavior in developmental context and will participate in experiential activities, such as conducting observations and collecting self-report data. Major themes: goals of developmental research, fundamental research designs, types of measurement, elements of good scientific writing, and ethical issues in the study of human development.

0101	Yixun Li	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	ONLINE
0201	Yixun Li	Seats (Total: 40)
	MW 2:00pm - 3:15pm	ONLINE

EDHD314 **Reading in the Early Childhood Classroom**

Credits: 3 Grading Method: Regular

Prerequisite: EDHD210, EDHD220, and EDSP211. Corequisite: EDHD425; and corequisite: EDHD419 or EDSP420. Restriction: Must be enrolled in Professional Early Childhood/Early Childhood Special Education Program; and minimum cumulative GPA of 2.75.

Early childhood students introduced to current research/methods on teaching language arts. Focus on development of linguistic and cognitive processes in emergent literacy and beginning reading and writing. Application to models for the instruction and assessment of reading/writing in preschool-aged children. Also includes material on classroom-based interventions for young children at risk of reading failure due to learning difficulties. Includes Field Experiences.

Restricted to major code 0822P.

0101	Donald Bolger	Seats (Total: 35)	
	Th 1:00pm - 3:00pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

EDHD319 **Selected Topics in Human Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics in human development in relation to contemporary culture.

Contact department for information to register for this course.

EDHD320 **Human Development Through the Life Span**

Credits: 3 Grading Method: Regular, Audit General Education: DSHS

Central concepts related to parameters of human development, individual and social, which arise throughout the life span. Continuity and change within the developing individual.

0101	Benjamin Rickles TuTh 2:00pm - 3:15pm	Seats (Total: 40) ONLINE
0201	Benjamin Rickles TuTh 9:30am - 10:45am	Seats (Total: 40) ONLINE
0301	Jennie Lee-Kim Th 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 40) ESJ 0224 ONLINE
0401	Min Wang W 12:30pm - 3:15pm	Seats (Total: 38) ONLINE

EDHD322 **The Young Child as Mathematician**

Credits: 3 Grading Method: Regular

Prerequisite: EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP 430, EDSP 433; OR Track 2: Must have completed EDHD415, EDHD 424. Corequisite: EDHD323, EDSP321, EDSP417, EDHD441, EDHD442, EDHD443, and EDHD444. Restriction: Must be in the Professional Early Childhood/Early Childhood Special Education program; and senior standing or higher; and minimum cumulative GPA of 2.75.

Provides a theoretical and instructional framework for mathematics instruction in early childhood classrooms. Development of understanding of early childhood mathematics that emphasizes how and in what environment young children learn mathematics. Current thinking about both content and instructional strategies for mathematics curriculum, including identification and review of standards and expectations for learning outcomes for all children. Assessment strategies for evaluating all children will be addressed. Includes Phase 1 Field Experience.

Restricted to major code 0822P.

0101	Geetha Ramani	Seats (Total: 26)	
	W 2:00pm - 4:00pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

EDHD323 **Children Study their World**

Credits: 3 Grading Method: Regular

Prerequisite: EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP430, EDSP433; or Track 2: Must have completed EDHD415, EDHD424. Corequisite: EDHD322, EDSP417, EDHD441, EDHD443, EDHD442, EDHD444, and EDSP321. Restriction: Must be in the Professional Early Childhood/Early Childhood Special Education program; and senior standing or higher; and minimum cumulative GPA of 2.75.

Provides theoretical and instructional framework for social studies instruction in inclusive early childhood classrooms. Course will reflect current thinking about content and instructional strategies for social studies curriculum; identification and review of standards/expectations for learning outcomes for all children; assessment strategies for evaluating of social studies objectives; use of data driven instruction to support all children; observation of children's understanding of their social world in field placements; opportunities to explore these understandings through interviews with children and the implementation of activities. Includes Phase 1 Field Experience.

Restricted to major code 0822P.

0101	Elisa Klein	Seats (Total: 26)	
	W 11:00am - 1:00pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

EDHD386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department; and junior standing or higher.

Contact department for information to register for this course.

EDHD411 **Child Growth and Development**

Credits: 3 Grading Method: Regular, Audit General Education: DSHS

Theoretical approaches to and empirical studies of physical, psychological and social development from conception to puberty. Implications for home, school and community.

0101	Natasha Cabrera W 9:30am - 12:15pm	Seats (Total: 38) ONLINE
0201	Jacquelyn Glidden TuTh 11:00am - 12:15pm	Seats (Total: 40) ONLINE

EDHD412 **Infant Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

Infant development across domains, including perceptual, motor, cognitive, language, social and emotional functioning from pre-natal through third year of life.

0101	Lauren Trakhman Th 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 38) ONLINE ONLINE

EDHD413 **Adolescent Development**

Credits: 3 Grading Method: Regular General Education: DSHS

Adolescent development, including special problems encountered in contemporary culture. Observational component and individual case study.

0101	Olga Walker MW 11:00am - 12:15pm	Seats (Total: 40) ONLINE
0201	Jennie Lee-Kim Tu 9:30am - 12:15pm	Seats (Total: 40) ONLINE

EDHD414 **Development of the Scientific Mind Across the Lifespan**

Credits: 3 Grading Method: Regular

Recommended: EDHD320.

Study of the educational, cognitive, social, and cultural factors that underlie the development of the scientific mind across the lifespan.

0101	Megan Hurley TuTh 2:00pm - 3:15pm	Seats (Total: 38) ONLINE

EDHD420 **Cognitive Development and Learning**

Credits: 3 Grading Method: Regular

Prerequisite: EDHD320, EDHD411, PSYC341, or PSYC355; or permission of EDUC-Human Development and Quantitative Methodology department.

Current developmental theories of cognitive processes such as language, memory, and intelligence and how differences in cognitive level (infancy through adolescence) mediate learning of educational subject matters.

0101	Olga Walker	Seats (Total: 40)
	MW 9:30am - 10:45am	ONLINE

EDHD425 **Language Development and Reading Acquisition**

Credits: 3 Grading Method: Regular, Audit

This course focuses on young children's language development and the relationship between language and reading acquisition. Students will learn: concepts central to language development; language achievements at different ages; concepts of emergent literacy; models of reading acquisition and skilled reading.

0101	Min Wang	Seats (Total: 35)
	Tu 1:00pm - 3:45pm	ONLINE
	Restricted to major code 0822P.	

EDHD426 **Cognitive and Motivational Literacy Content**

Credits: 3 Grading Method: Regular

Students preparing for secondary teaching will learn about the cognitive and motivational aspects of literacy and learning from text for the content areas of literature, science, history and mathematics. Different evidenced-based literacy approaches appropriate for content learning are presented. Characteristics of learning environments that enable students to engage productively with diverse texts, disciplinary tasks, and technological resources in content areas are identified.

Restriction: Must be a Secondary Education major.

0101	Daphne Williams	Seats (Total: 38)
	W 5:30pm - 8:15pm	ONLINE

EDHD441 **Data Driven Decision Making in EC/ECSE**

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and TRACK I: Must have completed EDSP430 and EDSP433 or TRACK 2: Must have completed EDHD415 and EDHD424. Corequisite: EDHD322, EDHD323, EDSP321, EDSP417, EDHD442, EDHD443, and EDHD444.

Students will be exposed to formative (e.g., classroom based, ongoing) and summative (e.g., standardized testing) assessments. Students will collect and analyze formative assessment data from their internship classrooms as the bases of planning and delivering instruction to meet the diverse needs of all learners. They will also analyze standardized assessment data to gain an understanding of measures used to determined cross-school and cross-teacher effectiveness. Includes Phase I field experience.

Restricted to major code 0822P.

0101	Jennifer McCatharn	Seats (Total: 26)	
	Meets October 19, 2020 - November 9, 2020		
	M 10:00am - 12:00pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

EDHD442 Interventions for Children with Behavioral Challenges

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and TRACK I: Must have completed EDSP430 and EDSP 433; or TRACK 2: Must have completed EDHD415 and EDHD 424. Corequisite: EDSP321, EDSP417, EDHD322, EDHD323, EDHD441, EDHD443, and EDHD444.

Students will expand knowledge of and develop skills to address challenging behaviors in inclusive early childhood classrooms. Students examine the causes underlying challenging behaviors during the early childhood years, and identify appropriate resources and support services for working with families to develop a unified approach when responding to behavioral challenges. Includes Phase I field experience.

Restricted to major code 0822P.

0101	Renee Garraway	Seats (Total: 26)	
	Meets September 14, 2020 - October 5, 2020		
	M 10:00am - 12:00pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

EDHD443 Interventions for Children with Social and Communication Challenges

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and TRACK I: Must have completed EDSP430 and EDSP 433; or TRACK 2: Must have completed EDHD415 and EDHD 424. Corequisite: EDHD322, EDSP321, EDSP417, EDHD323, EDHD441, EDHD442, and EDHD444.

Students will learn about the characteristics of children with autism spectrum disorder, pervasive developmental disorder, social communication disorder, and other related challenges and will be equipped to meet the needs of this group of children in the early childhood classroom. The utilization of Universal Design for Learning (UDL), Response to Intervention (RTI) and other early childhood special education approaches, as they apply to this specific group of children, will be addressed. Interventions designed to improve the functioning of children with autism spectrum disorders and related disorders will be reviewed. Includes Phase I field experience.

Restricted to major code 0822P.

0101	Renee Garraway	Seats (Total: 26)	
	Meets November 16, 2020 - December 14, 2020		
	M 10:00am - 12:00pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

EDHD444 **Action Research in EC/ECSE**

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP430 and EDSP433; OR Track 2: Must have completed EDHD415 and EDHD424. Corequisite: EDHD322, EDHD323, EDHD441, EDHD442, EDHD443, EDSP417, and EDSP321.

Students will become familiar with the EC/ECSE research process, literature and how teachers use action research to improve pedagogy and the experiences of children in classrooms or home-based contexts. Students will utilize this knowledge, as well as either a goal in an Individualized Education Plan (IEP) or Individualized Family Service Plan (IFSP) or School Improvement Plan (SIP), to develop an action research study commenced during the following semester. Includes Phase I field experience.

Restricted to major code 0822P. Class meets 9/21/20, 10/05/20, 11/02/20, 11/16/20, and 12/07/19.

0101	Renee Garraway, Stephanie Varner	Seats (Total: 26)	
	Meets September 21, 2020 - December 7, 2020		
	M 4:15pm - 6:15pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

EDHD460 **Educational Psychology**

Credits: 3 Grading Method: Regular, Audit General Education: DSHS

Prerequisite: PSYC100; or permission of EDUC-Human Development and Quantitative Methodology department.

Application of psychology to learning processes and theories. Individual differences, measurement, motivation, emotions, intelligence, attitudes, problem solving, thinking and communicating in educational settings.

0101	Patricia Alexander	Seats (Total: 35)
	MW 2:00pm - 3:15pm	ONLINE

EDHD489 **Field Experiences in Education**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Planned field experience (internship or research-based activities) related to Human Development. Credit not to be granted for experiences accrued prior to registration.

Contact department for information to register for this course.

EDHD498 **Special Problems in Education**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Available only to students who have definite plans for individual study of approved problems.

Contact department for information to register for this course.

EDHD629 **Seminar for the Center for Children, Relationships, and Culture**

Credits: 1 Grading Method: Regular, Audit

A seminar and colloquia series featuring speakers from the department, the college, the university, and other universities and institutions from across the world that aims to cover issues pertaining to contemporary theory and research in human development.

0101	Lucas Butler	Seats (Total: 20)
	Meets August 31, 2020 - December 14, 2020	
	W 11:15am - 1:45pm	ONLINE

EDHD690 **Theoretical Foundations of Human Development**

Credits: 3 Grading Method: Regular

Theoretical foundations in the field of human development with a focus on connections between the major theoretical paradigms in the literature and current research in developmental science.

Course format is synchronous - see instructor for details.

0101	Melanie Killen Th 1:00pm - 3:45pm Class time/details on ELMs	Seats (Total: 7) TWS 1320 ONLINE

EDHD718 **Apprenticeship in College Teaching; Apprenticeship in College Teaching**

(Perm req)

Credits: 1 Grading Method: Regular

For graduate students teaching autonomously for the first, second, or third tiem at the University of Maryland, College Park; not intended for teaching assistants. This course provides graduate student teachers with a set of structured experiences that foster professional growth and development in the role of college instructor. Includes seminars on the scholarship of college teaching and principles of optimal college classroom environments, peer and faculty in-class observations of teaching, and guided reflective analysis of experience in the classroom.

0101	Jennie Lee-Kim F 1:00pm - 3:30pm	Seats (Total: 10) ONLINE

EDHD720 **Social Development and Socialization Processes**

Credits: 3 Grading Method: Regular, Audit

This course covers social development and socialization processes across the life-span. The course typically covers the following topics: parent-child relationships, peer relationships, moral development, social cognition, social competence, social motivation, self-regulation, and cultural influences on development. This is core doctoral course.

Course format is synchronous - see instructor for details.

0101	Natasha Cabrera Tu 1:00pm - 3:45pm Class time/details on ELMs	Seats (Total: 10) TWS 1320 ONLINE

EDHD721 **Cognitive Development and Learning: An Introduction**

Credits: 3 Grading Method: Regular, Audit

Introductory survey into contemporary theory and research in cognitive development; applications to classroom learning.

0101	Geetha Ramani	Seats (Total: 20)
	M 1:00pm - 3:45pm	ONLINE

EDHD789 **Internship in Human Development**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Internship experience in one or more human service agencies in the community.

Contact department for information to register for this course.

EDHD798 **Laboratory in Human Development**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Independent research supervised by an instructor in a research setting.

Limited to human development majors.

Contact department for information to register for this course.

EDHD799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Registration required to the extent of six hours for master's thesis.

Limited to human development majors.

Contact department for information to register for this course.

EDHD888 **Apprenticeship in Human Development Research**

(Perm req)

Credits: 1-8 Grading Method: Regular, Audit

Apprenticeship in Human Development research.

Contact department for information to register for this course.

EDHD889 **Practicum in Human Development**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Field experience in applied human development at a professional level of competence in a particular role with appropriate supervision.

Contact department for information to register for this course.

EDHD898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDHD899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Registration required to 12-18 hours for a Ph.D. dissertation.

Limited to human development majors.

Contact department for information to register for this course.

EDHI Education Leadership, Higher Ed and International Ed Fall 2020

EDHI338B **Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Race, Gender, or Socioeconomic Status**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

Click here for more informtion.

0101	Adam Klager, Louisa Nkrumah, Kurubel Belay, Jazmin Pichardo, Alison Mojto, Kristina Mascarenas, Sika Wheeler, Peter DeCrescenzo **Meets August 31, 2020 - October 13, 2020** Tu 6:30pm - 8:30pm	Seats (Total: 48) ONLINE

EDHI338I **Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Religion and Spirituality; Size and Appearance**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

0201	Tynesha McCullers, Jazmin Pichardo, Le-Roy Battle, Imani Burwell, Kristina Mascarenas, Adam Klager, Ron Padron **Meets October 19, 2020 - December 11, 2020** Tu 6:00pm - 8:30pm	Seats (Total: 32) ONLINE

EDHI338L **Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Race, Gender, or Immigration**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

0201	Judith Martinez, Kurubel Belay, Jazmin Pichardo, Tynesha McCullers, Thomas Le, Xanh Tran, Adam Klager, Nathan Grine, Rose Malone, Laura Widener **Meets October 19, 2020 - December 11, 2020** W 6:30pm - 8:30pm	Seats (Total: 48) ONLINE

EDHI489 **Field Experiences in Education**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Contact department for information to register for this course.

EDHI498 **Special Problems in Education**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Available only to students who have definite plans for individual study of approved problems.

Contact department for information to register for this course.

EDHI606 **Political Economy of Education in a Global Context**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI606, EDPL606, or EDPS606. Formerly: EDPL606.

Examination of alternative economics perspectives and their implications for education policy and practice internationally, from local to global levels. The connection of education to issues of development, inequality, poverty, gender, and race will be discussed.

0101	Steven Klees	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	ONLINE

EDHI650 **Professional Seminar in Higher and Adult Education**

Credits: 3 Grading Method: Sat-Fail

Credit only granted for: EDHI650, EDPL650, or EDPS650. Formerly: EDPL650.

Introduction to higher and adult education as a field of study. Origins, current dimensions and problems, and emerging issues. Field trips to state and national capitols, and involvement in professional conferences.

0101	Sharon Fries-Britt	Seats (Total: 20)
	Th 4:15pm - 7:00pm	ONLINE
	Class time/details on ELMs	ONLINE

EDHI652 **Higher Education in American Society**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI652, EDPL652, or EDPS652. Formerly: EDPL652.

Examines the concepts of academic freedom, corporate autonomy and institutional accountability with emphasis on twentieth century relationships between higher education and government in the United States.

0101	Alberto Cabrera Casillas	Seats (Total: 15)
	Tu 4:15pm - 7:00pm	ONLINE

EDHI665 **College Access and Choice**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI665 or EDHI788L. Formerly: EDHI788L.

Examines the college-going process, how and why some students successfully navigate it, and what policies and programs can help students from disadvantaged or underrepresented backgrounds overcome barriers to college access and entry.

0101	Alberto Cabrera Casillas	Seats (Total: 15)
	M 4:15pm - 7:00pm	ONLINE

EDHI672 **Modes of Inquiry in Education Research**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI672, EDPL672, or EDPS672. Formerly: EDPL672.

Introduction to modes of inquiry appropriate to research on issues and problems in education. Examination of qualitative, quantitative and mixed research methods and designs with a focus on related standards of quality.

0101	Steven Klees	Seats (Total: 20)
	M 7:00pm - 9:45pm	ONLINE

EDHI679 **Master's Seminar**

Credits: 3 Grading Method: Regular, Audit

Directed study for master's degree students writing seminar papers.

Contact department for information to register for this course.

EDHI680 **Gender, Development, and Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI674, EDHI680 or EDHI788K. Formerly: EDHI788K.

Focusing on gender as an analytical frame and a discrete variable, a comprehensive view of the relationship between gender and education in the context of national development is presented. It identifies the conditions of men and women's education and policy efforts to promote equity and social transformation.

0101	Lauren DeCrosta	Seats (Total: 20)
	W 4:15pm - 7:00pm	ONLINE

EDHI689 **Practicum In Educational Administration and Supervision**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Promotes skill development in managerial, leadership and supervisory areas. Practicum is based on results of diagnostic instruments and an individual professional development plan.

Contact department for information to register for this course.

EDHI788Y **Special Topics in Education Policy and Administration; State-Level Higher Education Research**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in education policy and administration.

0101	Marvin Titus	Seats (Total: 15)
	W 4:15pm - 7:00pm	ONLINE

EDHI789 **Doctoral Practicum in Administration and Supervision**

Credits: 1-3 Grading Method: Sat-Fail

Experiential activities designed to enhance student skills. Based on Individual Professional Development Plan for each student.

Contact department for information to register for this course.

EDHI798 **Special Problems in Education**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master's, AGS, or doctoral candidates who desire to pursue special research problems under the direction of their advisors may register for credit under this number.

Contact department for information to register for this course.

EDHI799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

EDHI888 **Apprenticeship in Education**

Credits: 1-8 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Sharon Fries-Britt Contact instructor or department for details.	Seats (Total: 5)
2701	Marvin Titus Contact instructor or department for details.	Seats (Total: 2)
3501	Alberto Cabrera Casillas Contact instructor or department for details.	Seats (Total: 5)

EDHI889 **Internship in Education**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

EDHI895 **Research Critique Seminar**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Credit only granted for: EDHI895, EDPL895, or EDPS895. Formerly: EDPL895.

Critiques of research designs in preparation for the doctoral dissertation.

0101	Marvin Titus M 4:15pm - 7:00pm	Seats (Total: 10) ONLINE

EDHI898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDHI899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Registration required to the extent of 6-9 hours for an Ed.D. Project and 12-18 hours for a Ph.D. Dissertation.

Contact department for information to register for this course.

EDMS Measurement, Statistics, and Evaluation Fall 2020

EDMS451 **Introduction to Educational Statistics**

Credits: 3 Grading Method: Regular, Audit General Education: FSAR

Restriction: Sophomore standing or higher. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introduction to statistical reasoning; location and dispersion measures; computer applications; regression and correlation; formation of hypotheses tests; t-test; one-way analysis of variance; analysis of contingency tables.

0101	Gregory Hancock	Seats (Total: 120)
	TuTh 2:00pm - 3:15pm	ONLINE

EDMS610 **Classroom Assessment and Evaluation**

Credits: 3 Grading Method: Regular, Audit

Develop the understandings and skills needed to validly, reliably, and accurately assess student learning and to provide focused leadership in the area of classroom assessment.

Contact department for information to register for this course.

EDMS623 **Applied Measurement: Issues and Practices**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS410. And EDMS645; or students who have taken courses with comparable content may contact the department.

Measurement theory and its application at an intermediate level; test development, validation and interpretation; issues and recent developments in measurement.

0101	Monica Morell Th 4:15pm - 7:00pm	Seats (Total: 25) ONLINE

EDMS645 **Quantitative Research Methods I**

Credits: 3 Grading Method: Regular, Audit

Research design and statistical applications in educational research: data representation; descriptive statistics; estimation and hypothesis testing. Application of statistical computer packages is emphasized.

0101	Alice Donlan W 4:15pm - 7:00pm	Seats (Total: 30) ONLINE

EDMS646 **General Linear Models I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS645; or an equivalent introductory statistics course.

A first post-introductory inferential statistics course, with emphasis on analysis of variance procedures and designs from within the general linear modeling framework. Assignments include student analysis of education and related data; application of statistical software packages is emphasized.

0101	Yang Liu Tu 4:15pm - 7:00pm	Seats (Total: 30) ONLINE

EDMS651 **General Linear Models II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS646; or students who have taken courses with comparable content may contact the department.

Multiple regression and correlation analysis; trend analysis; hierarchical and stepwise procedures; logistic regression; software for regression analysis.

0101	Ji Seung Yang W 4:15pm - 7:00pm	Seats (Total: 30) ONLINE

EDMS655 **Introduction to Multilevel Modeling**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: EDMS651; or students who have taken courses with comparable content may contact the department.

Introduction to multilevel models and methodology as strategies for modeling change and organizational effects.

0101	Peter Steiner	Seats (Total: 20)
	W 4:15pm - 7:00pm	ONLINE

EDMS657 **Exploratory Latent and Composite Variable Methods**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: EDMS651.

Development of models for exploratory factor analysis and their practical applications. Additional topics will draw from latent class analysis, cluster analysis, mixture models, canonical correlation, multidimensional scaling, and configural frequency analysis.

0101	Gregory Hancock	Seats (Total: 30)
	Tu 4:15pm - 7:00pm	ONLINE

EDMS738G **Seminar in Special Problems in Measurement; Assessment and Evaluation for School Leaders: Part II**

Credits: 3

Grading Method: Regular, Audit

An opportunity for students with special interests to focus in depth on contemporary topics in measurement. Topics to be announced, but will typically be related to applied and theoretical measurement.

Contact department for information to register for this course.

EDMS769M **Special Topics in Applied Statistics in Education; Finite Mixture Models in Statistics and Measurement**

Credits: 3

Grading Method: Regular, Audit

Designed primarily for students majoring or minoring in measurement, statistics or evaluation.

Course format is synchronous - see instructor for details.

0101	Jeffrey Harring M 4:15pm - 7:00pm Class time/details on ELMs	Seats (Total: 15) TWS 1310 ONLINE

EDMS779 **Seminar in Applied Statistics; Mathematical Foundations and Simulation Techniques**

Credits: 3 Grading Method: Regular, Audit

Enrollment restricted to students with a major or minor in measurement, statistics or evaluation. Seminar topics will be chosen by individual student interest.

Course format is synchronous - see instructor for details.

0101	Jeffrey Harring Th 4:15pm - 6:50pm Class time/details on ELMs	Seats (Total: 12) TWS 1100 ONLINE

EDMS798 **Special Problems in Education**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master's, EDMS majors, or doctoral candidates who desire to pursue special research problems under the direction of their advisors may register for credit under this number.

Prerequisite: permission of department.

Contact department for information to register for this course.

EDMS799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Registration required to the extent of 6 credits.

Contact department for information to register for this course.

EDMS889 **Internship in Measurement and Statistics**

Credits: 3-8 Grading Method: Regular, Audit

Provides internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

EDMS898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDMS899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Registration required to the extent of 12 credits.

Contact department for information to register for this course.

EDSP Education, Special Fall 2020

EDSP210 **Introduction to Special Education**

(Perm req)

Credits: 3 Grading Method: Regular, Audit General Education: DVUP

Restriction: Sophomore standing or lower. Credit only granted for: EDSP210 or EDSP470.

Characteristics and needs of individuals receiving special education and related services. Current issues and practices in special education.

0101	Yewon Lee TuTh 5:00pm - 6:15pm	Seats (Total: 10) ONLINE
0301	Tasha Harris MW 12:30pm - 1:45pm	Seats (Total: 10) ONLINE
FC01	Briella Chen MW 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 21) ONLINE

EDSP211 **Introduction to Special Education**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVUP

Restriction: Sophomore standing or lower; and permission of EDUC-Counseling, Higher Education and Special Education department. Credit only granted for: EDSP210 or EDSP470.

An introduction to the field of special education. Students examine historical foundations, including legislation; review components necessary for effective service delivery; and develop an understanding of the role of collaboration and consultation with parents, school personnel and other professionals. In addition, students are introduced to the nature and characteristics of various disabilities and review current issues in the field including overrepresentation of minority students in special education, inclusion, and federal and state assessment mandates. Current topics are addressed including evidence-based practices, universal design for learning, and individualization and differentiation of instruction..

0101	Katryna Andrusik M 1:00pm - 3:45pm	Seats (Total: 22) ONLINE

EDSP220 **Disability in Community: Access, Accommodation, and Adaptation**

Credits: 3 Grading Method: Regular General Education: DSSP, DVCC

Examines the concept of disability in a variety of community settings. Drawing on classic and contemporary readings in psychology, sociology and special education, the course will couple conceptual and historical understanding of disability with first-hand service-learning experiences in the community. Students will develop a plan in several phases that encompasses principles of Universal Design for Living/Learning (UDL) to study and participate in community-based activities.

0101	Carolyn Fink Class time/details on ELMs	Seats (Total: 18) ONLINE

EDSP289I **Disability: From Stigma and Sideshow to Mainstream and Main Street**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB, D General Education: DSHS, DVUP, SCIS

Credit only granted for: EDSP289I or CHSE205. Formerly: EDSP289I.

Explores the cultural, historical, educational, and medical roots of difference among human beings and examines the impact of cultural and technological changes on individuals traditionally identified as disabled. The course is designed to develop a broad understanding of the concept of "disability" and the emerging technologies that shape contemporary understanding of this phenomenon and the lives of those considered disabled.

0101	Yewon Lee TuTh 9:30am - 10:45am	Seats (Total: 60) ONLINE

EDSP321 **The Young Child As Scientist**

Credits: 3 Grading Method: Regular

Prerequisite: EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP430 and EDSP433; OR Track 2: Must have completed EDHD415 and EDHD424. Corequisite: EDHD322, EDHD323, EDSP417, EDHD441, EDHD442, EDHD443, and EDHD444.

A theoretical and pedagogical framework for evidence-based inclusive science instruction in inclusive early childhood classrooms. Examination of principles of inquiry-based science learning and develop strategies for helping children acquire fundamental problem-solving skills that may be applied to understanding a wide array of science content. Assessment strategies for evaluating the achievement of science objectives, and the achievement for all children will be addressed. Includes field experience.

0101	Joan Lieber	Seats (Total: 28)
	W 8:00am - 10:30am	ONLINE

EDSP376 **Fundamentals of Sign Language**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Receptive and expressive skills in American Sign Language. Examination of the causes of deafness, characteristics of deaf education, and aspects of the culture of the deaf community.

0101	Michael Dunham	Seats (Total: 30)
	MW 5:00pm - 6:15pm	ONLINE

EDSP400 **Instruction of Students with Severe Disabilities I**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education program. Jointly offered with EDSP602. Credit only granted for: EDSP400 or EDSP602.

Functional assessment procedures and instructional methods for students with severe disabilities.

0101	Heather Stormont	Seats (Total: 40)
	W 4:15pm - 7:15pm	ONLINE

EDSP401 **Teaching Students with Disabilities in Elementary Classrooms**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of EDUC-Special Education department. Credit only granted for: EDSP401 or EDSP499F. Formerly: EDSP499F.

This course is designed for elementary education majors to prepare for teaching students with disabilities in elementary classrooms. The course examines the legal requirements for general education teachers in the public schools including best practices for participating in the Individual Education Program (IEP) team process, and understanding Response to Intervention (RTI) as a approach to the early identification and support of students with learning and behavior needs. Information is provided on the characteristics of students who have been identified as having high incidence disabilities (e.g., learning disabilities, attention deficit hyperactivity disorder, speech and language delays, emotional or behavioral disorders, and other health impairments). The course then provides information on universal design (UDL) principles for learning, instructional suggestions to include students with disabilities in the general classroom, co-teaching and methods for integrating technology and assistive technology to benefit all students.

0101	Carolyn Fink, Jason Chow M 4:15pm - 5:30pm Th 11:00am - 12:15pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Jason Chow, Carolyn Fink M 4:15pm - 5:30pm Tu 11:00am - 12:15pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Carolyn Fink, Jason Chow M 4:15pm - 5:30pm W 10:00am - 11:15am	Seats (Total: 25) ONLINE ONLINE	 Discussion

EDSP404 **Education of Students with Autism Spectrum Disorders**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Jointly offered with EDSP604. Credit onl y granted for: EDSP404 or EDSP604.

Characteristics, needs, assessment, and educational methods for students with autism spectrum disorders.

0101	Gulnoza Yakubova W 4:15pm - 7:00pm	Seats (Total: 40) ONLINE

EDSP411 **Universal Design for Learning**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: EDSP210 or EDSP470. Restriction: Must be in Special Education program.

Universal Design for Learning addresses a foundation framework for teacher candidates to learn how to design and implement instruction for a broad range of students with diverse needs rather than rely exclusively on accommodations to instruction for some students.

0101	Gulnoza Yakubova	Seats (Total: 24)
	Th 1:15pm - 4:00pm	ONLINE
	Class time/details on ELMs	ONLINE

EDSP413 **Behavior and Classroom Management in Special Education**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education program. Jointly offered with EDSP613. Credit only granted for: EDSP413, or EDSP613.

Use of applied behavior analysis for assessment of behavior and learning environments. Design of behavior and classroom management of students in special education.

0101	Kelli Cummings	Seats (Total: 40)
	Tu 4:15pm - 7:00pm	ONLINE

EDSP417 **Reading Diagnosis and Assessment**

Credits: 3 Grading Method: Regular

Prerequisite: EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP430 and EDSP433; OR Track 2: Must have completed EDHD415 and EDHD424. Corequisite: EDHD322, EDHD323, EDSP321, EDHD441, EDHD442, EDHD443, and EDHD444.

Reading Diagnosis and Assessment prepares teacher candidates to assess children in general and special early childhood educations settings in the areas of reading and writing in order to plan for instruction. The course will focus on diagnostic, screening, progress monitoring, and outcome assessments in early and beginning literacy. The course is designed to provide participants with the knowledge and skills necessary to collect and use a wide range of assessment data in general education and special education settings. Includes field experience.

0101	Kelli Cummings	Seats (Total: 28)
	M 1:00pm - 3:45pm	ONLINE

EDSP420 **Child Development, Birth to Three Years**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDHD210 and EDHD220. Corequisite: EDHD425 and EDHD314. Restriction: Must be in Special Education program. Cross-listed with ED HD434. Credit only granted for: EDHD419A, EDSP420 or EDHD434.

Child development theory and research, as well as knowledge about typical and atypical development of children from birth to three years of age. The course emphasizes learning for children with and without disabilities, and for children who are at risk due to poverty and other environmental factors. The course will introduce how children develop and the challenges they face within the domains of physical, cognitive, language, social, and emotional development, with particular attention paid to the impact of risk factors on development. Students will become familiar with delays and differences in development that may occur as the result of disability. Finally, students will learn the effects of cultural and linguistic differences on growth and development. Information about theory and research in child development for children with and without disabilities will be enhanced through a series of observational experiences, which will build upon concepts addressed during class. Includes field experiences.

0101	Deirdre Barnwell	Seats (Total: 36)
	Th 4:15pm - 7:00pm	ONLINE

EDSP425 **Pre-Internship I**

Credits: 1 Grading Method: Regular

Corequisite: EDSP451 and EDSP400. Restriction: Must be in the Special Education major.

This required EDSP field placement is a 3-hour per week seminar and field placement that meets across 15 weeks. Opportunities are provided to observe and participate in instructional experiences under the guidance of an assigned Host Teacher (HT) in a four-week experience in a high incidence placement AND a four-week experience in a low incidence (LI) placement. The purpose is to provide each special education teacher candidate (TC) with practical experience to complete field-based requirements and begin to meet the CEC Initial Preparation Standards (2012). Furthermore, since EDSP 425 is the first internship experience in the Special Education Program in the College of Education at University of Maryland, teacher candidates will become familiar with the Special Education Program, College of Education, Maryland State Department of Education (MSDE), Counsel for Accreditation of Educator Preparation (CAEP), and Council for Exceptional Children (CEC) expectations and requirements for graduation and teacher licensure.

0101	Dawn Martin	Seats (Total: 30)
	Tu 9:00am - 12:00pm	ONLINE

EDSP443 **Language and Literacy Acquisition in Children with Disabilities**

Credits: 3 Grading Method: Regular

Restriction: Must be in Special Education program. Additional information: This course is the first of four reading courses required by the Maryland State Department of Education for teacher certification in Special Education.

Language and literacy acquisition and characteristics of typical and atypical language development in supporting students with reading and writing disabilities.

0101	Nicole Abera	Seats (Total: 40)
	W 1:15pm - 4:00pm	ONLINE

EDSP451 **Curriculum and Instruction: Elementary/Middle Special Education**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education program. Jointly offered with EDSP652. Credit only granted for: EDSP451 or EDSP652.

Methods for instruction of students with disabilities in the general education curriculum. Collaboration with other professionals is included.

0101	Dawn Martin	Seats (Total: 40)
	M 1:00pm - 4:00pm	ONLINE

EDSP452 **Internship I: Elementary/Middle Special Education**

Credits: 2-4 Grading Method: Regular, Audit General Education: DSSP

Restriction: Must be in Special Education program. Jointly offered with EDSP692. Credit only granted for: EDSP452 or EDSP692.

Field experience in elementary/middle school special education.

0101	Stacey Williams	Seats (Total: 20)	
	F 10:00am - 12:00pm	ONLINE	
	WTh 8:00am - 3:00pm	ONLINE	Lab

EDSP470 **Introduction to Special Education**

Credits: 3 Grading Method: Regular, Audit General Education: DVUP

Restriction: Must not have completed EDSP210. Credit only granted for: EDSP210 or EDSP470.

Designed to give an understanding of the needs of all types of exceptional children.

0101	Yewon Lee	Seats (Total: 42)
	TuTh 5:00pm - 6:15pm	ONLINE

0301	Tasha Harris	Seats (Total: 38)
	MW 12:30pm - 1:45pm	ONLINE

EDSP484 **Reading and Writing Instruction in Special Education II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDSP416. Restriction: Must be in Special Education program. Jointly offered with EDSP684. Credit only granted for: EDSP48 4 or EDSP684.

Focus on the development of reading and writing programs for students in special education. Builds on foundations established in EDSP416.

0101	Jade Wexler	Seats (Total: 40)
	Tu 1:15pm - 3:45pm	ONLINE

EDSP487 **Family Partnerships in Special Education**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education program. Jointly offered with EDSP687. Credit only granted for: EDSP487 or EDSP687.

Strategies for communicating and working with families of students with disabilities.

0101	Alexandra Shelton	Seats (Total: 40)
	M 4:15pm - 7:00pm	ONLINE

EDSP498 **Special Problems in Special Education**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Available only to education majors who have definite plans for individual study of approved problems. Credit according to extent of work.

Special education majors only.

Contact department for information to register for this course.

EDSP498B **Special Problems in Special Education; Career Development and Advising**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Available only to education majors who have definite plans for individual study of approved problems. Credit according to extent of work.

0101	Jessica Chew, Glenn Kasten-Sportes F 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 15) ONLINE ONLINE	 Lab
0201	Jessica Chew, Glenn Kasten-Sportes F 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 5) ONLINE ONLINE	 Lab

EDSP499 **Workshops, Clinics, and Institutes in Special Education**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

The following type of educational enterprise may be scheduled under this course heading: workshops conducted by the special education department (or developed cooperatively with other departments, colleges and universities) and not otherwise covered in the present course listing. Laboratories, and special education centers; institutes developed around specific topics or problems and intended for designated groups such as school superintendents, principals and supervisors.

0901	Peter Leone Contact instructor or department for details.	Seats (Total: 5)

EDSP600 **Issues and Trends in Educating Individuals with Disabilities**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 9 credits in EDSP courses. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Examines research and practice relevant to the education of individuals with disabilities.

PLT1	Tori Page-Voth Class time/details on ELMs *Students in the Graduate Certificate in "Special Education for General Education Teachers in Inclusive Classrooms" may enroll without permission. All other graduate students must contact oes@umd.edu to determine registration eligibility.*	Seats (Total: 25) ONLINE

EDSP602 **Instruction of Students with Severe Disabilities I**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education (Master's) program. Credit only granted for: EDSP400 or EDSP602.

Functional assessment procedures and instructional methods for students with severe disabilities.

0101	Heather Stormont	Seats (Total: 40)
	W 4:15pm - 7:15pm	ONLINE

EDSP604 **Education of Students with Autism Spectrum Disorder**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Jointly offered with EDSP404. Credit onl y granted for: EDSP404 or EDSP604.

Characteristics, needs, assessment, and educational methods for students diagnosed as autistic or having a pervasive development disorder.

0101	Gulnoza Yakubova	Seats (Total: 40)
	W 4:15pm - 7:00pm	ONLINE

EDSP609 **Embracing Diversity: Teaching Students with Disabilities and Gifted Learners in Secondary**

Credits: 3 Grading Method: Regular

Designed for secondary education majors to prepare for teaching students with disabilities in secondary classrooms. Examines the legal requirements for general education teachers in the public schools including best practices for participating in the Individual Education Program (IEP) team process, and understanding Response to Intervention (RTI) as a approach to the early identification and support of students with learning and behavior needs. Information is provided on the characteristics of students who have been identified as having high incidence disabilities (e.g., learning disabilities, attention deficit hyperactivity disorder, speech and language delays, emotional or behavioral disorders, and other health impairments). Information is also provided on the characteristics of students who are considered gifted and/or talented, as well as instructional methods for differentiating instruction to meet their needs. Also provides information on universal design (UDL) principles for learning, instructional suggestions to include students with disabilities in the general classroom, co-teaching, and methods for integrating technology and assistive technology to benefit all students.

Contact department for information to register for this course.

EDSP613 **Behavior and Classroom Management in Special Education**

Credits: 3 Grading Method: Regular

Restriction: Must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program; or permission of instructor. Jointly offered with EDSP413. Credit only granted for: EDSP413 or EDSP613.

Applied behavior analysis for assessment of behavior and learning environments. Behavior and classroom management strategies for students in special education.

0101	Kelli Cummings	Seats (Total: 40)
	Tu 4:15pm - 7:00pm	ONLINE

EDSP625 **Seminar on Severely Handicapping Conditions**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Research and theories relevant to the education of severely handicapped individuals.

0101	Frances Kohl	Seats (Total: 15)
	M 4:15pm - 7:00pm	ONLINE

EDSP652 **Curriculum and Instruction: Elementary Special Education**

Credits: 3 Grading Method: Regular, Audit

Jointly offered with EDSP451. Credit only granted for: EDSP451 or EDSP6 52.

Methods for instruction of students with disabilities in the general education curriculum. Collaboration with other professionals is included.

For EDSP majors only.

0101	Dawn Martin	Seats (Total: 40)
	M 1:00pm - 4:00pm	ONLINE

EDSP684 **Reading and Writing Instruction in Special Education II**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: EDSP616. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Jointly offered with EDSP484. Credit only granted for: EDSP484 or EDSP684.

Development of effective reading and writing programs for students receiving special education services. Builds on the foundation established in EDSP 616.

0101	Jade Wexler	Seats (Total: 40)
	Tu 1:15pm - 3:45pm	ONLINE

EDSP687 **Family Partnerships in Special Education**

Credits: 3 Grading Method: Regular

Restriction: Must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program. Jointly offered with EDSP48 7. Credit only granted for: EDSP487 or EDSP687.

Strategies for communicating and working with families of students with disabilities.

0101	Alexandra Shelton	Seats (Total: 40)
	M 4:15pm - 7:00pm	ONLINE

EDSP692 **Graduate Internship I: Elementary/Middle Special Education**

Credits: 2-4 Grading Method: Regular, Audit

Restriction: Must be in Special Education (Master's) program. Credit only granted for: EDSP452 or EDSP692.

Field experience in elementary/middle school special education.

0101	Stacey Williams	Seats (Total: 5)	
	F 10:30am - 12:00pm	ONLINE	
	MTuWTh 8:00am - 1:00pm	ONLINE	Lab

EDSP798 **Special Problems in Special Education**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Intended for Master's, AGS, or doctoral students in education who desire to pursue a research problem.

Special education majors only.

Contact department for information to register for this course.

EDSP799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Registration required to the extent of six hours for Master's thesis.

Special education majors only.

Contact department for information to register for this course.

EDSP860 **Doctoral Research Seminar**

Credits: 3 Grading Method: Regular, Audit

Issues and procedures relevant to conducting and analyzing research in special education.

0101	Ana Taboada Barber	Seats (Total: 15)
	M 12:00pm - 3:00pm	ONLINE

EDSP875 **Policy Issues Affecting Individuals with Disabilities**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor; or must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program.

An analysis of current educational and disability issues and policies pertaining to children, youth, and adults with disabilities.

0101	Philip Burke	Seats (Total: 25)
	Th 4:15pm - 7:00pm	ONLINE

EDSP888 **Apprenticeship in Special Education**

(Perm req)

Credits: 1-8 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate- seeking graduate students.

Contact department for information to register for this course.

EDSP888A **Apprenticeship in Special Education; Apprenticeship in College Teaching**

Credits: 3 Grading Method: Regular

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate- seeking graduate students.

Contact department for information to register for this course.

EDSP889 **Internship in Special Education**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Special education majors only.

Contact department for information to register for this course.

EDSP898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDSP899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Registration required to the extent of 6-9 hours for an Ed.D. Project and 12-18 hours for a Ph.D. dissertation.

Special education majors only.

Contact department for information to register for this course.

EDUC Education Fall 2020

EDUC388 **Special Topics in Education; Guided Experience In College Teaching**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

0401	Sharon Vanwright	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Relates to the academic achievement program and should be taken concurrently with EDCI498, section 6601.		
SG91	Annie Foster Ahmed, Mary Gallagher	Seats (Total: 12)	
	W 3:30pm - 5:00pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Restricted to students in the Guided Study Sessions (GSS program at the Universities at Shady Grove). Prerequisite: Permission of the Associate Director of the Center for Academic Success (CAS) at USG.		

EDUC388T **Special Topics in Education; Guided Experience in College Teaching - UTA**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

0101	Olivia Murphy M 5:00pm - 7:00pm Class time/details on ELMs	Seats (Total: 30) ONLINE ONLINE	Discussion

EDUC388U **Special Topics in Education; New Student Programs**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

0201	Matthew Hicks W 6:00pm - 8:00pm Class time/details on ELMs *Restricted to students who are teaching UNIV100 or UNIV101.*	Seats (Total: 20) ONLINE ONLINE	Discussion
0501	Kasey Ezzat, Stacia Woycheck Tu 9:00am - 11:00am Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	Discussion

EDUC498 **Selected Topics in Education**

(Perm req)

Credits: 1-3 Grading Method: Regular

Current topics and issues in education.

0101	Olivia Murphy Contact instructor or department for details.	Seats (Total: 30)

EDUC498B **Selected Topics in Education; Career Development and Advising**

(Perm req)

Credits: 1-2 Grading Method: Regular

Current topics and issues in education.

0101	Glenn Kasten-Sportes, Jessica Chew F 10:00am - 10:50am Contact instructor or department for details.	Seats (Total: 15) ONLINE	
0201	Glenn Kasten-Sportes, Jessica Chew F 10:00am - 10:50am Contact instructor or department for details.	Seats (Total: 5) ONLINE	

EDUC689 **Practicum In Educational Administration and Supervision**

Credits: 1-3 Grading Method: Sat-Fail

Promotes skill development in managerial, leadership and supervisory areas. Practicum is based on results of diagnostic instruments and an individual professional development plan.

Contact department for information to register for this course.

EDUC702 **Applied Research Design for Education Leaders**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC702 or EDHI702. Formerly: EDHI 702.

Emphasizes quantitative and qualitative methodologies to investigate a range of educational problems. Designed for EdD doctoral students.

Contact department for information to register for this course.

EDUC703 **Conducting Library Research for Dissertations**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education; and must be enrolled in EdD in School System Leadership.

Course is designed to provide students in the Ed.D. doctoral program in School System Leadership with the skills necessary to conduct library research in preparation for developing the literature review for the Capstone.

Contact department for information to register for this course.

EDUC704 **Introduction to Writing the Dissertation in Practice**

Credits: 2 Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education and Must be in EdD School System Leadership program.

This course is designed to provide students in the Ed.D. program with specific strategies and skills needed to complete their Dissertation of Practice. Skills include constructing a problem statement and developing a cohesive argument for a proposed solution.

Contact department for information to register for this course.

EDUC740 **Managing Educational Organizations in a Diverse Society**

Credits: 4

Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC740 or EDHI740. Formerly: EDHI740.

Contemporary social and cultural influences that impact on the management of schools and school systems in a diverse society. The effects on schools and school systems of changes in the economy, family structure, demographics and technology will be examined.

Contact department for information to register for this course.

EDUC760 **The Human Dimension in Administration**

Credits: 4

Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC760 or EDHI760. Formerly: EDHI760.

Course focuses on theory, research findings, and current practices in managing human resources in educational organizations. Issues related to performance evaluations, professional development, and legal and ethical standards are addressed.

Contact department for information to register for this course.

EDUC767 **Seminar on School District Leadership**

Credits: 4

Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC767 or EDHI767. Formerly: EDHI767.

Examination of theory and research related to school district leadership with focus on improvement sciences. Course uses improvement science model to understand organizational, political, community, instructional problems of practice.

Contact department for information to register for this course.

EDUC888 **Applied Apprenticeship in Education**

Credits: 1-3

Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

Contact department for information to register for this course.

EDUC888E **Applied Apprenticeship in Education; Improvement Science**

Credits: 1 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

Contact department for information to register for this course.

EDUC888L **Applied Apprenticeship in Education; Introduction to Library Research**

Credits: 2 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

Contact department for information to register for this course.

EDUC888W **Applied Apprenticeship in Education; Introduction to Scholarly Writing**

Credits: 2 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

Contact department for information to register for this course.

EDUC898 **Pre-Candidacy Research**

Credits: 2-4 Grading Method: Regular

Pre-Candidacy Research

Contact department for information to register for this course.

EDUC899 **Dissertation of Practice Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Registration required to the extent of 6-9 hours for an Ed.D. Dissertation.

PGCPS II EdD Outreach Program. Registration restricted to program.

Contact department for information to register for this course.

ENAE Engineering, Aerospace Fall 2020

ENAE100 **The Aerospace Engineering Profession**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Recommended: ENES100 and MATH140.

Overview of salient aspects of professional practice of Aerospace Engineering. Introduction to the range of technical expertise needed to succeed in the profession and the objectives of the various parts of the Aerospace Engineering program at UMCP in supporting students' efforts in gaining the required knowledge and skills. Familiarization with departmental faculty and their areas of research, creation of links with other students, professional society student chapters, and available resources. Discussion of ethical issues, business requirements, and their interactions with technical developments.

0101	Norman Wereley Tu 12:30pm - 1:45pm M 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Norman Wereley Tu 12:30pm - 1:45pm M 4:00pm - 4:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Norman Wereley Tu 12:30pm - 1:45pm Tu 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0104	Norman Wereley Tu 12:30pm - 1:45pm W 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0105	Norman Wereley Tu 12:30pm - 1:45pm W 4:00pm - 4:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

ENAE202 **Computing Fundamentals for Engineers**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: Must be concurrently enrolled in MATH141. Restriction: Permission of ENGR-Aerospace Engineering department. Credit only granted for: ENAE202 or ENME202.

Introduction to computational tools for the solution of engineering problems. C++ & MATLAB programming including branching and loops, functions, file handling, arrays, and data structures. Students will be introduced to object-oriented programming, basic computing, algorithms, and principles of software engineering.

0104	Sami Ainane	Seats (Total: 38)	
	MW 11:00am - 11:50am	ONLINE	
	W 2:00pm - 3:50pm	ONLINE	Lab

ENAE283 **Introduction to Aerospace Systems**

Credits: 3 Grading Method: Regular

Prerequisite: PHYS161, MATH141, and ENES102. Corequisite: PHYS261 and PHYS260. Restriction: Must be in Engineering: Aerospace program. Credit only granted for: (ENAE281 and ENAE282) or ENAE283. Formerly: ENAE281 and ENAE282.

Introduction to airplanes and space vehicles as aerospace systems. Fundamentals that describe these systems. Elements of aerodynamics, airfoils and wings. Airplane performance, stability and control. Aircraft and rocket propulsion. Fundamentals of orbital motion. Aspects of vehicle conceptual design.

0101	Mary Bowden	Seats (Total: 65)
	TuTh 9:30am - 10:45am	ONLINE
0102	Andrew Becnel	Seats (Total: 65)
	TuTh 9:30am - 10:45am	ONLINE

ENAE283H **Introduction to Aerospace Systems**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: PHYS161, MATH141, and ENES102. Corequisite: PHYS261 and PHYS260. Restriction: Must be in Engineering: Aerospace program. Credit only granted for: (ENAE281 and ENAE282) or ENAE283. Formerly: ENAE281 and ENAE282.

Introduction to airplanes and space vehicles as aerospace systems. Fundamentals that describe these systems. Elements of aerodynamics, airfoils and wings. Airplane performance, stability and control. Aircraft and rocket propulsion. Fundamentals of orbital motion. Aspects of vehicle conceptual design.

0101	Alison Flatau	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

ENAE301 **Dynamics of Aerospace Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS271, MATH461, PHYS270, MATH246, ENAE283, ENAE202, ENES102, and MATH241. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Kinematics and dynamics of three dimensional motion of point masses and rigid bodies with introduction to more general systems. Primary emphasis on Newtonian methods. Practice in numerical solutions and computer animation of equations of motion using MATLAB.

0101	Derek Paley TuTh 12:30pm - 1:45pm F 1:00pm - 1:50pm	Seats (Total: 46) ONLINE ONLINE	 Lab
0102	Derek Paley TuTh 12:30pm - 1:45pm F 2:00pm - 2:50pm	Seats (Total: 46) ONLINE ONLINE	 Lab
0103	Derek Paley TuTh 12:30pm - 1:45pm F 3:00pm - 3:50pm	Seats (Total: 46) ONLINE ONLINE	 Lab
0104	Derek Paley TuTh 12:30pm - 1:45pm F 4:00pm - 4:50pm	Seats (Total: 46) ONLINE ONLINE	 Lab

ENAE311 **Aerodynamics I**

Credits: 3 Grading Method: Regular

Prerequisite: PHYS271, MATH461, PHYS270, MATH246, ENAE283, ENES220, ENAE202, MATH241, and ENES232. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department. And junior standing or higher.

Fundamentals of aerodynamics. Elements of compressible flow. Normal and oblique shock waves. Flows through nozzles, diffusers and wind tunnels. Elements of the method of characteristics and finite difference solutions for compressible flows. Aspects of hypersonic flow.

0101	Christopher Cadou TuTh 9:30am - 10:45am	Seats (Total: 95) ONLINE
0102	Ashish Nedungadi TuTh 5:00pm - 6:15pm	Seats (Total: 40) ONLINE

ENAE311H **Aerodynamics I**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: PHYS271, MATH461, PHYS270, MATH246, ENAE283, ENES220, ENAE202, MATH241, and ENES232. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department. And junior standing or higher.

Fundamentals of aerodynamics. Elements of compressible flow. Normal and oblique shock waves. Flows through nozzles, diffusers and wind tunnels. Elements of the method of characteristics and finite difference solutions for compressible flows. Aspects of hypersonic flow.

0101	Stuart Laurence TuTh 9:30am - 10:45am	Seats (Total: 35) ONLINE	

ENAE362 Aerospace Instrumentation and Experimentation

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246 and ENAE283. Restriction: Must be in Engineering: Aerospace program; and junior standing or higher.

Basic instrumentation electronics including DC electronics, AC electronics, semiconductors, electro-optics and digital electronics. Sensing devices used to carry out experiments in Aerospace Engineering includes metrology, machine tool measurements, bridge circuits, optical devices, and introduction to computer based data acquisition. Topics chosen to support measurements in aerodynamics, flight structures and flight control.

0101	Allen Winkelmann MW 1:00pm - 1:50pm M 2:00pm - 5:00pm	Seats (Total: 30) ONLINE ONLINE	 Lab
0102	Allen Winkelmann MW 1:00pm - 1:50pm Tu 2:00pm - 5:00pm	Seats (Total: 30) ONLINE ONLINE	 Lab
0103	Allen Winkelmann MW 1:00pm - 1:50pm W 2:00pm - 5:00pm	Seats (Total: 30) ONLINE ONLINE	 Lab
0104	Allen Winkelmann MW 1:00pm - 1:50pm Th 2:00pm - 5:00pm	Seats (Total: 30) ONLINE ONLINE	 Lab
0105	Allen Winkelmann MW 1:00pm - 1:50pm W 8:50am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Lab

0106	Allen Winkelmann MW 1:00pm - 1:50pm F 8:50am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Lab

ENAE380 **Flight Software Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENAE283 and ENAE202. Restriction: Must be in Engineering: Aerospace program; and junior standing or higher.

Avionics using advanced sensor and computing technologies are at the heart of every modern Aerospace vehicle. Advanced software systems to improve cockpit safety and enable unmanned and deep-space missions. Object-oriented programming and software engineering concepts required to design and build complex flight software systems. Software validation, verification and real-time performance analysis to assess flight software system reliability and robustness. Human-machine interface design for piloted systems. Automatic onboard data acquisition and decision-making for unmanned air and space vehicles.

Three hours of lecture and two hours of laboratory per week. Prerequisite: ENAE202 and ENAE283. Junior standing. For ENAE majors only.

0101	Anthony Banes MW 12:00pm - 12:50pm F 9:00am - 10:50am	Seats (Total: 30) ONLINE ONLINE	 Lab
0102	Anthony Banes MW 12:00pm - 12:50pm F 11:00am - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Lab
0103	Anthony Banes MW 12:00pm - 12:50pm F 1:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Lab
0201	Mumu Xu Class time/details on ELMs M 9:00am - 10:50am	Seats (Total: 30) ONLINE ONLINE	 Lab
0202	Mumu Xu Class time/details on ELMs Tu 2:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Lab

0203	Mumu Xu	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	M 2:00pm - 3:50pm	ONLINE	Lab

ENAE398H **Honors Research Project**

(Perm req)

Credits: 1-3 Grading Method: Regular

Planned sequence of steps in aerospace honors research in which students take three (3) consecutive semesters of this course in partial fulfillment of aerospace engineering honors program requirements. The first semester consists of a series of seminars and meetings with faculty mentors on honors research; two semesters consist of undergraduate honors research project and paper conducted under the direction of an aerospace engineering faculty member to be presented at a conference.

Contact department for information to register for this course.

ENAE403 **Aircraft Flight Dynamics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENAE414 and ENAE432. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Study of motion of aircraft, equations of motion, aerodynamic force representation, longitudinal and lateral motions, response to controls and to atmospheric disturbances, handling qualities criteria and other figures of merit.

0101	Michael Otte	Seats (Total: 78)	
	TuTh 3:30pm - 4:45pm	ONLINE	

ENAE423 **Vibration and Aeroelasticity**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENAE324. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Dynamic response of single and multiple degrees of freedom systems, finite element modeling, wing divergence, aileron reversal, wing and panel flutter.

0101	Andrew Becnel	Seats (Total: 60)	
	MWF 11:00am - 11:50am	ONLINE	

0102	Giuseppe Pennisi MWF 11:00am - 11:50am	Seats (Total: 60) ONLINE

ENAE423H **Vibration and Aeroelasticity**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENAE324. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Dynamic response of single and multiple degrees of freedom systems, finite element modeling, wing divergence, aileron reversal, wing and panel flutter.

0101	Olivier Bauchau MW 10:30am - 11:45am	Seats (Total: 35) ONLINE

ENAE441 **Space Navigation and Guidance**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENAE404 and ENAE432. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Principles of navigation. Celestial, radio, and inertial navigation schemes. Navigational and guidance requirements for orbital, planetary, and atmospheric entry missions. Fundamentals of communications and information theory. Link budgets, antennas and telemetry systems.

0101	Liam Healy TuTh 9:30am - 10:45am	Seats (Total: 100) ONLINE

ENAE455 **Aircraft Propulsion and Power**

Credits: 3

Grading Method: Regular, Pass-Fail

Prerequisite: ENES232, ENAE414, and ENAE311. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Thermodynamic cycle analysis, aerothermochemistry of fuels and propellants, operating principles of piston, turbojet, fanjet, and other variations of airbreathing aircraft power units.

0101	Kenneth Yu TuTh 12:30pm - 1:45pm	Seats (Total: 80) ONLINE

ENAE457 **Space Propulsion and Power**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: PHYS271, ENES232, PHYS270, and ENAE311. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department. And senior standing.

Thermodynamic cycle analysis, aerothermochemistry of fuels and propellants, operating principles of rocket, ion, and other exoatmospheric power units.

0101	Ray Sedwick TuTh 2:00pm - 3:15pm	Seats (Total: 100) ONLINE

ENAE481 **Principles of Aircraft Design**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENAE324, ENAE362, and ENAE432. Corequisite: ENAE414. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Aircraft design principles blending both synthesis and analysis. The iterative nature of the design process. Applied aerodynamics. Elements of aircraft performance calculation and optimization. Design of aircraft including payload, crew and avionics provisions, propulsion selection and sizing, aerodynamic configuration optimization, mass properties, stability and control characteristics, and vehicle subsystems. Individual student projects in aircraft design.

This course is restricted to students in the AHS Helicopter Design Compe tition and requires permission of the department to enroll.

0101	Dominic Palumbo MWF 2:00pm - 2:50pm	Seats (Total: 50) ONLINE
0201	Sung Lee TuTh 2:00pm - 3:15pm *This course is restricted to students on the Design, Build, Fly team and requires permission from the department to enroll.*	Seats (Total: 15) ANS 0408
0301	Vengalattore Nagaraj MWF 2:00pm - 2:50pm *This course is restricted to students in the AHS Helicopter Design Competition and requires permission of the department to enroll.*	Seats (Total: 10) EGR 1202

0401	James Baeder	Seats (Total: 10)
	MWF 3:00pm - 3:50pm	CHE 2110
	Restricted to students in the DOE Challange and requires permission of the isntructor to enroll.	

ENAE483 **Principles of Space Systems Design**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENAE404, ENAE324, ENAE362, and ENAE432. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Principles of space systems analysis and vehicle design. Launch vehicle performance analysis and optimization. Design of vehicle systems including avionics, power, propulsion, life support, human factors, structures, actuator and mechanisms, and thermal control. Design processes and design synthesis. Individual student projects in vehicle design.

0101	David Akin, Andrew Becnel	Seats (Total: 92)
	TuTh 11:00am - 12:15pm	ONLINE

ENAE499 **Elective Research**

(Perm req)

Credits: 3 Grading Method: Regular

Undergraduate research project and paper conducted under the direction of an aerospace engineering faculty member to be presented at a conference or competition.

Contact department for information to register for this course.

ENAE601 **Astrodynamics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE404; or permission of ENGR-Aerospace Engineering department.

Mathematics and applications of orbit theory, building upon the foundations developed in ENAE 404 and ENAE 441. Topics include two body orbits, solutions of Kepler's equation, the two-point boundary value problem, rendezvous techniques, and Encke's method.

0101	Christine Hartzell	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

ENAE603 **Near-Earth Object Exploration**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENAE601. Restriction: Must be in one of the following programs (ENGR: MS/PhD-Aerospace Engineering (Master's); ENGR: MS/PhD-Aerospace Engineering (Doctoral)). Credit only granted for: ENAE788N or ENAE603. Formerly: ENAE788N.

An overview of the near-Earth objects (NEOs) of our solar system--the asteroids and comets whose orbits closely approach Earth's orbit--and what we know about them, what we're learning about them, and how to design spacecraft missions to interact with them.

0101	Brent Barbee TuTh 5:00pm - 6:15pm	Seats (Total: 15) ONLINE

ENAE631 **Helicopter Aerodynamics I**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENAE414 and ENAE311. Or permission of ENGR-Aerospace Engineering department; and permission of instructor.

A history of rotary-wing aircraft, introduction to hovering theory, hovering and axial flight performance, factors affecting hovering and vertical flight performance, autorotation in vertical descent, concepts of blade motion and control, aerodynamics of forward flight, forward flight performance, operational envelope, and introduction to rotor acoustics.

Those sections that begin with a letter are taught via ITV and are not intended for College Park campus students.

0101	Inderjit Chopra TuTh 2:00pm - 3:15pm	Seats (Total: 20) JMP 2116
TV01	Inderjit Chopra TuTh 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA

ENAE635 **Helicopter Stability and Control**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

Prerequisite: ENAE631. Restriction: Permission of ENGR-Aerospace Engineering department.

Advanced dynamics as required to model rotorcraft for flight dynamic studies. Development of helicopter simulation models and specifications of handling qualities. Methods for calculation of trim, poles, frequency response, and free flight response to pilot inputs.

0101	John Tritschler, Ondrej Juhasz TuTh 3:30pm - 4:45pm	Seats (Total: 10) ONLINE

ENAE636 **Helicopter Dynamics II**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENAE788R or ENAE636. Formerly: ENAE788R.

Aerodynamics, dynamics and aeromechanics of helicopters and tilt rotor aircraft. Experimental testing and mathematical modeling required for the design and analysis of such aircraft.

0101	Anubhav Datta MW 9:30am - 10:45am	Seats (Total: 15) JMP 2222
TV01	Anubhav Datta MW 9:30am - 10:45am	Seats (Total: 5) ONLINE

ENAE641 **Linear System Dynamics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE432.

Linear systems; state space, multi-input, multi-output models; eigenstructure; controllability, observability, singular value analysis; multivariable Nyquist condition; observer design; introduction to Kalman filtering. Full state feedback techniques including pole placement and LQR/LQG techniques; introduction to loop shaping and robustness.

0101	Robert Sanner TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE

ENAE642 **Atmospheric Flight Control**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: ENAE403 and ENAE432; or students who have taken courses with comparable content may contact the department.

Exposure to flight guidance and control. Draws heavily from vehicle dynamics as well as feedback theory, and careful treatment of the non-linear aspects of the problem is critical. Conventional sythesis techniques are stressed, although modern methods are not ignored. Multivariable system analysis is included, along with flight-control design objectives and hardware limitations. Emphasis on aircraft and missiles.

0101	Jared Grauer TuTh 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

ENAE651 **Smart Structures**

Credits: 3 Grading Method: Regular, Audit

Topics related to the analysis, design, and implementation of smart structures and systems: modeling of beams and plates with induced strain actuation; shape memory alloys; electro-rheological fluids; magnetostrictor and electrostricter actuators and fiber optic sensors.

0101	Inderjit Chopra TuTh 9:30am - 10:45am	Seats (Total: 20) JMP 2216
TV01	Inderjit Chopra TuTh 9:30am - 10:45am	Seats (Total: 15) Location: TBA

ENAE653 **Nonlinear Finite Element Analysis of Continua**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE652; or students who have taken courses with comparable content may contact the department.

Finite element formulation of nonlinear and time dependent processes. Introduction to tensors, nonlinear elasticity, plasticity and creep. Application to nonlinear solids including aerospace structures, such as shells undergoing finite rotations.

0101	Sung Lee MW 5:00pm - 6:15pm	Seats (Total: 20) ONLINE

ENAE655 **Structural Dynamics**

Credits: 3 Grading Method: Regular, Audit

Advanced principles of dynamics necessary for structural analysis; solutions of eigenvalue problems for discrete and continuous elastic systems, solutions to forced response boundary value problems by direct, modal, and transform methods.

0101	Olivier Bauchau	Seats (Total: 35)
	MW 2:00pm - 3:15pm	ONLINE

ENAE673 **Aerodynamics of Incompressible Fluids**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Undergraduate courses in differential equations, incompressible, and compressible flow (ENAE311; and one course from ENAE414; ENME331, OR ENME640, or equivalent). Restriction: Must be in ENGR: MS/PhD-Aerospace Engineering (Master's) program.

Introduces the fundamental concepts of incompressible flows. Topics to be addressed include the conservation equations, potential flow, lift and drag, Navier-Stokes equations, boundary layers and similarity solutions, and solutions to classical problems.

0101	Pino Martin	Seats (Total: 20)
	MW 9:30am - 10:45am	ONLINE

ENAE675 **Unsteady Aerodynamics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE414; and permission of instructor. Credit only granted for: ENAE672 or ENAE675. Formerly: ENAE672.

Classical theories of incompressible unsteady aerodynamics with an introduction to modeling techniques. Topics include: unsteady Bernoulli's equation, added mass, the indicial response method, dynamic stall, and modern applications.

0101	Anya Jones	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ENAE684 **Computational Fluid Dynamics I**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Aerospace Engineering department.

Partial differential equations applied to flow modelling, fundamental numerical techniques for the solution of these equations, elliptic, parabolic, and hyperbolic equations, elements of finite difference solutions, explicit and implicit techniques. Applications to fundamental flow problems.

0101	James Baeder TuTh 11:00am - 12:15pm	Seats (Total: 10) JMP 2216
TV01	James Baeder TuTh 11:00am - 12:15pm	Seats (Total: 15) Location: TBA

ENAE788C **Selected Topics in Aerospace Engineering; Modern Test Flight**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Restriction: Must be a student with an ENAE major or permission of instructor.

0101	John Tritschler TuTh 5:00pm - 6:15pm	Seats (Total: 10) ONLINE

ENAE788D **Selected Topics in Aerospace Engineering; Advanced Space Systems Design**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

0101	David Akin TuTh 11:00am - 12:15pm	Seats (Total: 8) ONLINE

ENAE788K **Selected Topics in Aerospace Engineering; Estimation and Control of Stochastic Systems**

Credits: 3 Grading Method: Regular, Audit

0101	Robert Sanner MW 2:00pm - 3:15pm	Seats (Total: 15) ONLINE
TV01	Robert Sanner MW 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA

ENAE788X **Selected Topics in Aerospace Engineering**

Credits: 1-3 Grading Method: Regular, Audit

0101	David Akin	Seats (Total: 20)
	MW 2:00pm - 3:15pm	ONLINE

ENAE799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENAE898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENAE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENCE Engineering, Civil Fall 2020

ENCE100 **Introduction to Civil and Environmental Engineering**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

An overview of the department of Civil and Environment Engineering. Students are introduced to the undergraduate curriculum and will be exposed to other undergraduate and graduate students at various points in their program. The course blends panel presentations by seniors and graduate students, faculty and practitioners with a project and book review to be performed by the students.

0101	Charles Schwartz	Seats (Total: 132)
	Class time/details on ELMs	ONLINE

ENCE200 **Civil Engineering Computation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES100, MATH141, and ENES102; and permission of ENGR-Civil & Environmental Engineering department. Credit only granted for: ENCE200 or ENCE202. Formerly: ENCE202.

Development of knowledge and skills in managing, analyzing, interpreting, and communicating spatial information. Computer Aided Drawing (CAD) and Geographic Information Systems (GIS) are introduced in the context of civil and environmental engineering applications.

0101	Frank White MW 2:00pm - 3:15pm	Seats (Total: 38) ESJ 2212
0201	Frank White MW 3:30pm - 4:45pm	Seats (Total: 38) ESJ 2212

ENCE201 **Engineering Information Processing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220 and MATH241; and permission of ENGR-Civil & Environmental Engineering department. Corequisite: MATH246. Credit only granted for: ENCE201 or ENCE203.

Exploration of algorithms for solving problems in several important areas of numerical computing: roots of equations; matrix algebra and the systems of linear equations; function approximation, numerical differentiation and integration; and ordinary differential equations. Issues of solution accuracy, robustness, and efficiency are also considered. Numerical techniques are presented in the context of engineering applications, and example problems are solved using a variety of computer-based tools (primarily MATLAB).

0101	Peter Chang MWF 2:00pm - 2:50pm	Seats (Total: 55) ONLINE

ENCE215 **Engineering for Sustainability**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM135; and permission of ENGR-Civil & Environmental Engineering department.

Engineers have a key role to play in planning, designing, building, and ensuring a sustainable future. In this class, a problem-based approach is used to examine fundamentally-based analyses and approaches for engineering as sustainable society, with a focus on sustainable use of energy and materials, sustainable infrastructure solutions, atmospheric sustainability and sustainable water supply, and human population growth and resource consumption and its implications for sustainability.

0101	Natasha Andrade TuTh 8:00am - 9:15am	Seats (Total: 24) ONLINE
0201	Natasha Andrade TuTh 9:30am - 10:45am	Seats (Total: 24) ONLINE
0301	Natasha Andrade TuTh 2:00pm - 3:15pm	Seats (Total: 24) ONLINE

ENCE300 **Fundamentals of Engineering Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220; and permission of ENGR-Civil & Environmental Engineering department.

Behavior, physical, mechanical and chemical properties, design and performance of civil engineering materials, including aggregates, cement, concrete, asphalt binders and mixtures, plastics and geosynthetics, timber, metals and alloys. Modified and advanced highway materials (polymer and rubber modified mixtures, high performance concrete, composites, smart materials). Laboratory testing with hands-on experience on aggregates, Portland cement concrete, asphalt mixtures, timber and metals as per SUPERAVE, ACI design methods, and ASTM standards and specifications.

Restricted to students in the College of Engineering.

0101	Dimitrios Goulias Tu 12:30pm - 2:30pm Th 10:30am - 12:30pm	Seats (Total: 18) CSI 1115 EGL 0120	 Lab
	Alternating face-to-face/online meeting. See instructor for details.		
0102	Dimitrios Goulias Tu 12:30pm - 2:30pm Th 12:30pm - 2:30pm	Seats (Total: 18) CSI 1115 EGL 0120	 Lab
	Alternating face-to-face/online meeting. See instructor for details.		
0201	Dimitrios Goulias Tu 12:30pm - 2:30pm Th 2:30pm - 4:30pm	Seats (Total: 18) CSI 1115 EGL 0120	 Lab
	Alternating face-to-face/online meeting. See instructor for details.		
0202	Dimitrios Goulias Tu 12:30pm - 2:30pm Th 4:30pm - 6:30pm	Seats (Total: 18) CSI 1115 EGL 0120	 Lab
	Alternating face-to-face/online meeting. See instructor for details.		

ENCE302 **Probability and Statistics for Civil and Environmental Engineers**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH246 and ENCE201; and permission of ENGR-Civil & Environmental Engineering department.

Statistics is the science of data. Civil Engineers must often make decisions based on incomplete, variable or uncertain information. In addition, modern methods of design and analysis need to account for variability in natural, engineered and human systems. After successful completion of this class, a student should have facility and familiarity with established basic techniques for managing data, modeling variability and uncertainty, communicating about data and decisions, and supporting or defending a decision or judgment based on uncertain or incomplete data.

Restricted to students in the College of Engineering.

0101	Bilal Ayyub MWF 2:00pm - 2:50pm	Seats (Total: 65) ONLINE

ENCE305 **Fundamentals of Engineering Fluids**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220, PHYS260, and PHYS261; and permission of ENGR-Civil & Environmental Engineering department. Credit only granted for: BIOE331, ENCE305, ENFP300, or ENME331.

The theoretical bases for fluid statics and dynamics, including the conservation of mass, energy and momentum. Modeling of hydraulic systems are introduced. Emphasis on pipe flow and open-channel hydraulics, with real-world applications.

0101	Kaye Brubaker MWF 8:00am - 8:50am	Seats (Total: 40) IRB 0324
0102	Jongmin Park MWF 10:00am - 10:50am	Seats (Total: 40) ESJ 0224

ENCE310 **Introduction to Environmental Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS260 and ENCE215; and permission of ENGR-Civil & Environmental Engineering department.

Introduction to the physical, chemical and biological systems relating to the quality of water, land and air environments. Fundamental principles will be emphasized, current environmental pollution problems will be examined and methods of pollution abatement discussed.

0101	Birthe Kjellerup TuTh 2:00pm - 3:15pm *Alternating face-to-face/online meeting. See instructor for details.*	Seats (Total: 66) ONLINE

ENCE320 **Introduction to Project Management**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering or in the Project Management Minor. Credit only granted for: ENCE320 or ENCE325.

Learn the fundamentals of project management and the analytical skills for the management side of engineering projects.Topics include economic analysis, project screening and selection, organizational and project structure, scheduling, budgeting, resource management, life cycle costing, and project control.

Restricted to students in the College of Engineering.

0101	John Driessnack	Seats (Total: 75)
	Th 5:00pm - 7:30pm	ONLINE

ENCE325 **Introduction to Construction Project Management**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in a major in ARCH-School of Architecture, Planning, & Preservation; or must be in the Construction Project Management minor. And permission of ENGR-Civil & Environmental Engineering department. Credit only granted for: ENCE 320 or ENCE 325.

Learn the basic topics in sourcing, planning, financing, designing, contracting, constructing and operating buildings and other facilities in the built infrastructure. Topics include construction economics, design constructability reviews, construction process planning, contracts and procurement strategies, project scheduling and resource utilization, site layout planning, project cost and quality controls, temporary structures, environmental sustainability, project handover procedures, facility operation and management, IT-based tools for construction project and resource management.

0101	Stephen Wooldridge	Seats (Total: 55)
	Th 5:00pm - 7:30pm	ONLINE

ENCE340 **Fundamentals of Geotechnical Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220; and permission of ENGR-Civil & Environmental Engineering department.

Introductory study of soils in civil engineering. Soil origin, phase relationships and classification schemes. Soil hydraulics: capillary, effective stress, permeability and seepage considerations. Basic stress distribution theories and soil consolidation-settlement analysis. Integration of shear strength evaluation with slope stability analysis. If time permits, topics such as applications in geoenvironmental engineering will be covered.

0101	Ahmet Aydilek TuTh 9:30am - 10:45am	Seats (Total: 57) ONLINE

ENCE353 **Introduction to Structural Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department; and (MATH246 and ENES220).

The basic tools of structural analysis and design. Design loads. Equilibrium of external and internal forces. Shear and moment diagrams in beams and frames. Truss analysis. Influence line diagrams. The slope-deflection method and method of consistent deformation. Matrix stiffness methods for beams, frames and trusses.

Restricted to students in the College of Engineering.

0101	Mark Austin MWF 9:00am - 9:50am	Seats (Total: 60) ONLINE

ENCE360 **Analysis of Civil Engineering Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE201 and MATH140; and permission of ENGR-Civil & Environmental Engineering department.

Introduction to systems approach and systems analysis in civil and environmental engineering. Introduction to systems analysis tools that facilitate engineering management decision making including optimization and computer simulation. Introduction to linear and nonlinear mathematical optimization including linear and integer programming, elementary nonlinear programming and dynamic programming.

0101	Ali Haghani TuTh 9:30am - 10:45am	Seats (Total: 36) ONLINE
0102	Ali Haghani TuTh 11:00am - 12:15pm	Seats (Total: 36) ONLINE

ENCE370 **Introduction to Transportation Engineering and Planning**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE201, PHYS260, and PHYS261; and permission of ENGR-Civil & Environmental Engineering department.

Engineering problems of transportation by highways, airways, pipelines, waterways, and railways. Transportation modes and technologies, vehicle dynamics, basic facility design, traffic stream models, capacity analysis, transportation planning, evaluation and choice, and network analysis.

Restricted to students in the College of Engineering.

0101	Cinzia Cirillo	Seats (Total: 60)	
	Class time/details on ELMs	ONLINE	

ENCE411 **Environmental Engineering Science**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE310; and permission of ENGR-Civil & Environmental Engineering department.

Introduces the analytical techniques available to assess performance of engineering processes as they relate to water, soil, and air treatment and quality. The basic principles of environmental management, economics of waste treatment, by-product reutilization, and energy cycles are introduced and discussed. Alternative technologies are introduced and evaluated mostly by assessing their potential to reduce waste, minimize energy use, and promote sustainability. Students' activities include, a weekly lab to provide hands-on experience with environmental quality measurements and treatment techniques; on-site visits to regional industries that undertake sustainable practices; and a final research project where experimental design and laboratory techniques are used to assess interactions between technologies and natural systems and their potential for reducing environmental impacts.

0101	Alba Torrents	Seats (Total: 12)	
	TuTh 11:00am - 11:50am W 10:00am - 1:00pm	CHM 1402 EGR 0136	Lab
	Alternating face-to-face/online meeting. See instructor for details.		
0102	Alba Torrents	Seats (Total: 12)	
	TuTh 11:00am - 11:50am W 2:00pm - 5:00pm	CHM 1402 EGR 0136	Lab
	Alternating face-to-face/online meeting. See instructor for details.		

ENCE420 **Selection and Utilization of Construction Equipment**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management minor.

Learn to evaluate and select construction equipment with a focus on mechanized equipment for earthwork and building construction.Learn about the parties involved in procurement, operation and maintenance, and how to cost-effectively plan, select, and utilize equipment for earthmoving, paving, formwork, trenching, rock excavation, tunneling, site preparation, and steel and concrete construction. Explore trends in equipment design, construction automation, and robotics.

0101	Miroslaw Skibniewski M 3:30pm - 6:00pm	Seats (Total: 25) ONLINE

ENCE422 **Project Cost Accounting and Economics**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor.

Learn: the fundamentals of accounting; project cost accounting principles as they apply to project management; project cost accounting; and the fundamentals of engineering economics.Topics include: project feasibility analysis; reading and analyzing financial statements; cash management; cash flow analysis; depreciation and taxes; and impact on profitability; the principles of activity based costing; net present value analysis; the framework for project performance measurement, cost performance indices, and earned value analysis.

0101	Qingbin Cui M 5:00pm - 7:30pm	Seats (Total: 60) ONLINE

ENCE423 **Project Planning, Estimating & Scheduling**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor. And permission of ENGR-Civil & Environmental Engineering department.

Learn the fundamentals of project planning, estimating, and scheduling. Understand the concepts of planning; to reduce uncertainty, improve efficiency of the operation, to set and meet objectives, and to provide a basis for monitoring and controlling the work. Be introduced to: the concepts of resource definition, assignment and management, and; the basics of project estimating (pricing) methods including global pricing strategies, types of estimates, pricing processes, overhead and profit, and project financing.Learn the basics of project scheduling including; bar charts, network-based methodologies, and linear scheduling techniques. Emphasis is placed on Critical Path Method (CPM) scheduling, a network based methodology. Be exposed to the use of scheduling software and will actually develop a CPM schedule for an actual construction project as part of a semester project.

Restricted to students in the College of Engineering.

0101	Kenneth O'Connell Tu 5:00pm - 7:30pm	Seats (Total: 70) ONLINE

ENCE424 **Communication for Project Managers**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor.

Learn the fundamentals of communications for project managers. Emphasis is on interpersonal and group communications; through voice, electronic, and written messages; project cycle and reports and presentations during this cycle; and communications for employment.

0101	Shana Webster-Trotman Tu 5:00pm - 7:30pm Class time/details on ELMs	Seats (Total: 35) ONLINE ONLINE
0102	Shana Webster-Trotman W 5:00pm - 7:30pm Class time/details on ELMs	Seats (Total: 35) ONLINE ONLINE

ENCE426 **Construction Documentation and BIM Applications in Engineering and Construction**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor.

Learn the basics of construction documentation methods, with particular emphasis on Building Information Modeling (BIM). Topics include: the fundamentals of assembly, coordination, and maintenance of construction documents and implementation of BIM techniques in the design and construction processes, and; a review of Autodesk, Revit, and Navisworks and other leading BIM software. Lectures from project management faculty supplemented by guest lecturers from the construction industry.

0101	Jason Dreher W 5:00pm - 7:30pm	Seats (Total: 40) ONLINE
0201	Jason Dreher Th 5:00pm - 7:30pm	Seats (Total: 40) ONLINE

ENCE430 **Introduction to Infrastructure and Resilience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE302; or students who have taken courses with comparable content may contact the department. Corequisite: ENCE360; or students who have taken courses with comparable content may contact the department. Jointly offered with ENCE632. Credit only granted for: ENCE632, ENCE688U, ENCE430 or ENCE489U. Formerly: ENCE489U.

Develops system-level skills for the planning, design, maintenance, and operation of resilient infrastructure systems. Through this course, we will discuss a variety of infrastructure systems, both public and private, and their role in communities before and after disasters. The themes of the course will be grounded in the four phases of emergency management (mitigation, preparedness, response, and recovery) and the role that infrastructure plays in each. Through these applications areas, we will study a variety of conceptual, analytical, and computational models that support informed decision-making for these systems under uncertainty.

0101	Allison Reilly W 2:00pm - 4:40pm	Seats (Total: 25) ONLINE

ENCE432 **Ground Water Hydrology**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE305; and permission of ENGR-Civil & Environmental Engineering department.

Concepts related to the development of the ground water resources, hydrology, hydrodynamics of flow through porous media, hydraulics of wells and basin-wide ground water development. Fundamentals of ground water pollution are introduced.

Restricted to students in the College of Engineering.

0101	Kaye Brubaker MWF 9:00am - 9:50am	Seats (Total: 42) IRB 0324

ENCE433 **Assessment of Natural Hazards for Engineering Applications**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE302. Jointly offered with ENCE633. Credit only granted for: ENCE433 or ENCE633.

Ensuring the resilience of infrastructure and other engineered systems requires an assessment of the natural hazards to which the systems are exposed. Probabilistic natural hazard assessment evaluates how likely a location is to experience hazard events (e.g., hurricanes or earthquakes) and how likely those events are to cause various impacts (e.g., large surges, intense rainfall, high winds, or ground shaking). This course will review the basic science of natural hazards and provide the foundational concepts of probability and statistics required for developing models to assess the frequency and severity of natural hazards. This course will present methodologies for assessment of multiple types of natural hazards (e.g., seismic, precipitation, riverine, coastal, and wind hazards).

0101	Michelle Bensi M 2:00pm - 4:40pm	Seats (Total: 25) CSI 1115

ENCE441 **Foundation Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE340; and permission of ENGR-Civil & Environmental Engineering department.

Critical review of classical lateral earth pressure theories, analysis of retaining walls and reinforced earth walls, subsurface explorations, bearing capacity and settlement of shallow foundations, design of deep foundations that includes both pile foundations and drilled shafts.

Restricted to students in the College of Engineering. Alternating face-to-face/online meeting. See instructor for details.

0101	Mohamed Aggour TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 70) ESJ 2212 ONLINE

ENCE444 **Experimental Methods in Geotechnical Structural Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE353 and ENCE340; and permission of ENGR-Civil & Environmental Engineering department.

In the geotechnical engineering part of the course, major soils testing and their interpretation including classification, compaction, strength, and compressibility will be undertaken. The structural engineering part of this course covers test planning, loading apparatus, instrumentation, data acquisition and data analysis, as well as basic aspects of structural testing techniques and shake-table test.

0101	Ahmet Aydilek, Yunfeng Zhang Tu 12:30pm - 1:30pm W 1:00pm - 4:00pm	Seats (Total: 20) CSI 1122 EGL 0120	 Lab
0201	Ahmet Aydilek, Yunfeng Zhang Tu 12:30pm - 1:30pm W 1:00pm - 4:00pm	Seats (Total: 15) ANS 0408 EGL 0106	 Lab

ENCE454 **Design of Concrete Structures**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE353; and permission of ENGR-Civil & Environmental Engineering department. Formerly: ENCE451.

Combined bending and compression, development and anchorage of reinforcement, deflections, design of slabs including one-way and two-way, design of footings, retaining walls, introduction to prestressed concrete, design of multi-story buildings.

0101	Amde Amde MWF 11:00am - 11:50am	Seats (Total: 45) ONLINE
0201	Amde Amde MWF 10:00am - 10:50am	Seats (Total: 35) ONLINE

ENCE466 **Design of Civil Engineering Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Audit CORE: CS

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Senior standing. Additional information: Must be taken in the semester in which the student graduates.

A major civil engineering design experience that emphasizes development of student creativity, development and use of design methodologies, evaluation of alternate solutions, feasibility considerations, and detailed system descriptions. Realistic design constraints including economic factors, safety, aesthetics, and reliability will be imposed. Students will work in design project groups and be required to exercise oral and written communication skills.

Restricted to students in the College of Engineering.

0101	Russell Anderson Tu 3:30pm - 4:45pm Th 3:30pm - 4:45pm	Seats (Total: 40) ESJ 0224 EGR 1156	 Lab
	Alternating face-to-face/online meeting. See instructor for details.		
0102	Russell Anderson Tu 3:30pm - 4:45pm Th 2:00pm - 3:15pm	Seats (Total: 40) ESJ 0224 EGR 1156	 Lab
	Alternating face-to-face/online meeting. See instructor for details.		

ENCE470 **Highway Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE302 and ENCE370; and permission of ENGR-Civil & Environmental Engineering department.

Highway location and design, highway engineering economics, traffic engineering, traffic measurement devices and technologies. Includes discussion of technological advances in traffic flow and capacity, such as signal systems, corridor control, automatic driver information, incident detection and autonomous vehicle operation.

Restricted to students in the College of Engineering.

0101	ShiaauLir Wang MWF 10:00am - 10:50am	Seats (Total: 40) ONLINE

ENCE489 **Special Problems in Civil Engineering**

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

A course arranged to meet the needs of exceptionally well prepared students for study in a particular field of civil engineering.

Contact department for information to register for this course.

ENCE489E **Special Problems in Civil Engineering; Data Assimilation and Data Analytics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A course arranged to meet the needs of exceptionally well prepared students for study in a particular field of civil engineering.

0101	Barton Forman	Seats (Total: 12)
	TuTh 4:00pm - 5:15pm	ONLINE

ENCE602 **Project Procurement Management**

Credits: 3 Grading Method: Regular, Audit

Fundamental concepts and techniques for project acquisition and procurement are presented. Students are introduced to the PMBOK Guide six-step procurement process and expected to develop an in-depth understanding of project evaluation, planning, financing, contracting, negotiation, and procurement execution. It will also cover emerging methods, principles, and practices in infrastructure project procurement, including Public-Private Partnerships, Carbon project procurement, and Clean Development Mechanism.

0101	Qingbin Cui	Seats (Total: 17)
	M 1:00pm - 3:40pm	ONLINE

ENCE603 **Data Analytics for Project Managers**

Credits: 3 Grading Method: Regular, Audit

Recommended: ENCE627.

Introduction to identifying, analyzing, assessing, and managing data inherent to engineering projects. Includes: statistical principles, concepts, and models; decision science aspects of data systems; Bayesian methods; measurement theory; subjective aspects of statistics and data appraisal. Examples are drawn from software development, systems integration, and other large engineering projects. Covers statistical basics, subjective probability, Bayesian data analysis, introduction to decision theory, Monte Carlo simulation, value of information, and risk-based decision making from data.

0101	Gregory Baecher	Seats (Total: 25)
	Th 1:00pm - 3:40pm	ONLINE

ENCE606 **Graduate Introduction to Project Scheduling**

Credits: 3 Grading Method: Regular, Audit

Students are taught the basics of project scheduling and the various scheduling approaches that are currently being used in the design and construction industry. Project planning techniques will be covered and basic scheduling methods will be taught including the use of bar charts. Critical Path Method (CPM), Program Evaluation and Review (PERT) and Linear Scheduling (Line of Balance) methods.

0101	Kenneth O'Connell	Seats (Total: 25)
	Tu 4:00pm - 6:40pm	ONLINE

ENCE610 **Fundamentals of Structural Analysis**

Credits: 3 Grading Method: Regular, Audit

Cartesian tensor notation. Linear forms of the general equilibrium, compatability, and constitutive equations. The calculus of variations. The principles of virtual work and complementary virtual work. Self-adjoint problem formulations.

0101	Peter Chang	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	ONLINE
	Alternating face-to-face/online meeting. See instructor for details.	

ENCE613 **Structural Dynamics**

Credits: 3 Grading Method: Regular, Audit

Formerly: ENCE653.

Analysis of the dynamic response of structrues and structural components subjected to impact load, transient load, and ground excitations; study of single degree-of-freedom and multi degree-of-freedom systems in classical closed form solution and approximate numerical solution; solution in the frequency domain and the use of finite element method.

0101	Yunfeng Zhang	Seats (Total: 25)
	W 5:00pm - 7:30pm	ESJ 2204

ENCE622 **Construction Automation & Robotics**

Credits: 3 Grading Method: Regular, Audit

Covers advanced technologies leading to redesign and partial or full automation of selected construction processes utilizing industrial robotics. Lectures and presentations will cover topics such as basic robotic technology (robot kinematics and dynamics, industrial manipulators, mobility bases, end effectors, sensors, control systems, and robot task programming), design of automated construction processes, selection of means and methods for automated construction processes, robot ergonomics and safety, calculation of costs and benefits of construction robots in selected applications, engineering and economic feasibility of automation and robotics in the construction industry.

0101	Miroslaw Skibniewski	Seats (Total: 25)
	Th 8:00pm - 9:00pm	ONLINE
	Class time/details on ELMs	ONLINE

ENCE627 **Project Risk Management**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed ENCE627.

Introduction to identifying, analyzing, assessing, and managing risks inherent to engineering projects. Includes: probability modeling, choice and value theory, schedule and cost risk, risk mitigation and transfer, and contract considerations of project risk. Examples are drawn from construction, software development, systems integration, and other large engineering projects; and cover probability basics, subjective probability, statistical data analysis, introduction to decision theory, Monte Carlo simulation, value of information, and risk-based decision making.

0101	Gregory Baecher	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	Weekly video conferences: Thursday 7:00am-8:00am or Wednesday 6:00pm-7:00pm.	

ENCE632 **Introduction to Infrastructure and Resilience**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENCE302; and ENCE360. Or students who have taken courses with comparable content may contact the department. Credit only granted for: ENCE688U, ENCE632, ENCE489U or ENCE430. Formerly: ENCE688U.

Develops system-level skills for the planning, design, maintenance, and operation of resilient infrastructure systems. Through this course, we will discuss a variety of infrastructure systems, both public and private, and their role in communities before and after disasters. The themes of the course will be grounded in the four phases of emergency management (mitigation, preparedness, response, and recovery) and the role that infrastructure plays in each. Through these applications areas, we will study a variety of conceptual, analytical, and computational models that support informed decision-making for these systems under uncertainty.

0101	Allison Reilly	Seats (Total: 25)
	W 2:00pm - 4:40pm	ONLINE

ENCE633 **Assessment of Natural Hazards for Engineerng Applications**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENCE302. Jointly offered with ENCE433. Credit only granted for: ENCE633 or ENCE433.

Ensuring the resilience of infrastructure and other engineered systems requires an assessment of the natural hazards to which the systems are exposed. Probabilistic natural hazard assessment evaluates how likely a location is to experience hazard events (e.g., hurricanes or earthquakes) and how likely those events are to cause various impacts (e.g., large surges, intense rainfall, high winds, or ground shaking). This course will review the basic science of natural hazards and provide the foundational concepts of probability and statistics required for developing models to assess the frequency and severity of natural hazards. This course will present methodologies for assessment of multiple types of natural hazards (e.g., seismic, precipitation, riverine, coastal, and wind hazards).

0101	Michelle Bensi	Seats (Total: 25)
	M 2:00pm - 4:40pm	CSI 1115

ENCE650 **Process Dynamics in Environmental Systems**

Credits: 3 Grading Method: Regular, Audit

Formerly: ENCE636.

The fundamentals of heterogeneous equilibria, rates of environmental reactions, and flow and material transport or presented. Applications of these principles will be presented to small and large scale environmental problems involving liquid, gas, and solid phases. Both natural and engineered environmental systems will be examined.

0101	Allen Davis	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ESJ 1215

ENCE651 **Chemistry of Natural Waters**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENCE633 or ENCE651. Formerly: ENCE633.

Application of principles from chemical thermodynamics and kinetics to the study and interpretation of the chemical composition of natural waters is rationalized by considering metal ion solubility controls, pH, carbonate equilibria, adsorption reactions, redox reactions and the kinetics of oxygenation reactions which occur in natural water environments.

0101	Alba Torrents	Seats (Total: 20)
	TuTh 8:00am - 9:15am	EGR 0108

ENCE652 **Microbiological Principles of Environmental Engineering**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENCE637 or ENCE652. Formerly: ENCE637.

An examination of microbiological principles directly affecting humans and the surrounding environment. Special emphasis is given to the understanding of microbial physiology and in environmental engineering related to water and land systems including aerobic and anaerobic treatment processes involved in nutrient/waste recycling as well as impact of xenobiotic compounds on processes water, soil and sediment.

0101	Birthe Kjellerup	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	ONLINE

ENCE661 **Project Cost Accounting and Finance**

Credits: 3 Grading Method: Regular, Audit

This course reviews the fundamentals of accounting; examines project cost accounting principles, applications, and impact on profitability; examines the principles of activity based costing; covers the elements involved in cash management; introduces the framework for how projects are financed and the potential impact financing has on the projects; and a framework for evaluating PC based systems and what resources are needed for an effective project cost system.

0101	James Myers	Seats (Total: 38)
	M 4:00pm - 6:40pm	ONLINE
	Weekly video conference: Monday 7:00 - 8:00pm or Tuesday 3:30 - 4:30 pm.	

ENCE662 **Introduction to Project Management**

Credits: 3 Grading Method: Regular, Audit

Introduction to project management including: overview and concepts of project management (principles, body of knowledge, strategies); planning successful projects (defining, specifying, delivery options, scheduling, budgeting); implementing (organizing the team, work assignments, team building, effective leadership); executing (performance measurement, maintaining the schedule, adjustments/mid-course corrections, record keeping, status reporting, communications, managing conflict, time management); and closeout(performance measurement, maintaining the schedule, adjustments/mid-course corrections, record keeping, status reporting, communications, managing conflict, time management).

0101	John Johnson	Seats (Total: 36)
	Class time/details on ELMs	ONLINE
	Weekly video conferences Monday at 12:00 - 1:00 OR 8:00 - 9:00 pm.	

ENCE664 **Legal Aspects of Engineering Design and Construction**

Credits: 3 Grading Method: Regular, Audit

Examines ways in which the legal system affects the design and construction process. Focuses on contract types and the relationships between the parties in different delivery systems. Covers basics of procurement protocols along with negotiating techniques and strategies. Topics include contract law, the relationships between the parties, tort and negligence law, and the statutory principles affecting construction.

Weekly video conference after 7:50 p.m.

0101	Mark Groff	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
PM01	Thomas Powell, Thomas Barham, Mark Groff	Seats (Total: 10)
	Class time/details on ELMs	ONLINE
	Weekly video conference: Tuesday 7AM-8AM or Tuesday 8PM-9PM.	

ENCE665 **Management of Project Teams**

Credits: 3 Grading Method: Regular, Audit

Experience has shown that really excellent project managers are not only technically competent but that they have above average skills in human relations and communications. The course will prepare project managers to optimize the utilization of their most important resource: people. Relying primarily on a wide range of research and experience in the Project Team, this course will help guide project managers in building the other skills needed to be truly successful in the competitive Project Team.

Video Conference: meets Thursday 6:00pm-7:30pm weekly.

0101	Jocelyn Davis	Seats (Total: 30)
	Class time/details on ELMs	ONLINE
	Weekly video conferences: Thursday 6:00pm-7:30pm.	

ENCE666 **Cost Engineering and Control**

Credits: 3 Grading Method: Regular, Audit

Analytical techniques to estimate and control project costs, including site investigation, quantity takeoff, work analysis, and bid preparation. Systematic cost control as related to job production and historical data. Includes the fundamentals of different types of cost estimating, the appropriate use of each, and examination of popular software. This course is designed to help students develop the ability to utilize techniques of cost estimating, cost and schedule control and project management as they apply to engineering and construction work. Students will understand why it is crucial to understand the various types of cost estimating and the appropriate use of each, activity-based costing, conceptual estimating and budgeting, unit cost estimating, parametric estimating, detailed estimating, learning curves and progress functions.

0101	Neil Schulman	Seats (Total: 25)
	Meets August 31, 2020 - December 7, 2020	
	Class time/details on ELMs	ONLINE
	Weekly video conferences: Tuesday 1:00-2:00pm or Wednesday 7:00-8:00pm.	

ENCE670 **Highway Traffic Characteristics and Measurements**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENCE470; or permission of instructor.

The study of the fundamental traits and behavior patterns of road users and their vehicles in traffic. The basic characteristics of the pedestrian, the driver, the vehicle, traffic volume and speed, stream flow and intersection operation, parking, and accidents.

0101	Gang-Len Chang	Seats (Total: 29)
	Th 12:30pm - 3:10pm	ESJ 2204

ENCE672 **Regional Transportation Planning**

Credits: 3 Grading Method: Regular, Audit

Factors involved and the components of the process for planning statewide and regional transportation systems, encompassing all modes. Transportation planning studies, statewide traffic models, investment models, programming and scheduling.

0101	Paul Schonfeld	Seats (Total: 29)
	Tu 5:00pm - 7:30pm	PHY 1410

ENCE681 **Freight Transportation Analysis**

Credits: 3 Grading Method: Regular, Audit

Application of operations research and system analysis methods to freight transportation systems. Cost and output analysis, terminal location, freight transportation demand models, freight transportation network equilibrium models and analytic models for analyzing the operations of rail, motor carrier, water carrier and air cargo systems.

0101	Paul Schonfeld	Seats (Total: 20)
	M 5:00pm - 7:45pm	EGR 0108

ENCE688E **Advanced Topics in Civil Engineering; Bioremediation**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

Introduction to microbiological and engineering fundamentals of bioremediation. Coverage will emphasize current and emerging technologies for major classes of environmental contaminants and contaminated site characteristics; relevant microbial ecology, biochemistry and physiology; site data needed to assess the feasibility of the bioremediation option; design and operation of engineered bioremediation systems, including reactor and in situ approaches; monitoring methods for evaluation the success of bioremediation projects; technical evaluation of selected case studies.

0101	Guangbin Li	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	CSI 1122

ENCE688I **Advanced Topics in Civil Engineering; Discrete Choice Analysis**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

The course presents the fundamentals of the random utility theory and the derivation of discrete choice models. The methods presented rely on econometric modeling approaches; in particular formulation, estimation and application of models of choice behavior will be presented. The instructor will propose several interactive lab sessions, where students will work with real data on (transportation) case studies. The discipline is highly multi-disciplinary, applications of discrete choice models can be found in marketing, energy studies, economics, geography, social and political science.

0101	Cinzia Cirillo	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ENCE688P **Advanced Topics in Civil Engineering; Data Mining and Machine Learning for the Built Environment**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

0101	Mark Austin	Seats (Total: 20)
	MW 5:00pm - 6:15pm	ONLINE

ENCE688T **Advanced Topics in Civil Engineering; Disaster Resilience Seminar**

Credits: 1 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

This seminar with address varied topics in identifying, analyzing, assessing, and managing engineered systems resilient to natural, anthropogenic, and other hazards. This seminar series comprises guest lectures and internal faculty and student presentations on topics related to disaster resilience. Examples are drawn from foundational concepts; hazard science; planning, engineering, and design; risk and resilience assessment; and implementation.

0101	Gregory Baecher	Seats (Total: 25)
	F 11:00am - 12:00pm	ONLINE

ENCE689 **Seminar**

Credits: 1-16 Grading Method: Regular, Audit

Majors only. Other majors require permission of department.

Contact department for information to register for this course.

ENCE689E **Seminar; Data Assimilation and Data Analytics**

Credits: 3 Grading Method: Regular, Audit

0101	Barton Forman	Seats (Total: 12)
	TuTh 4:00pm - 5:15pm	ONLINE

ENCE689R **Seminar; Research Methods**

Credits: 1 Grading Method: Regular, Audit

It is strongly recommended for PhD candidates to develop their research topic and build strong research capability. The course provides a sound understanding of the enterprise of engineering research, from selecting a thesis topic, to the development of a research proposal, to planning and executing a research plan, to writing a dissertation and publishable articles. Students will review published research reports,conduct a literature survey, and write a preliminary research proposal. Students will carry out assignments involving design of small experiments, and learn how to statistically analyze data and report results. The course comprises lectures from PM faculty and guest lecturers.

0101	Gregory Baecher	Seats (Total: 25)
	F 10:00am - 10:50am	ONLINE

ENCE743 **Soil Dynamics and Earthquake Engineering**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENCE642 or ENCE743. Formerly: ENCE642.

Review of theory of vibration and wave propagation in elastic media. Field and laboratory methods for determining dynamic soil properties. Analysis and design of soil-foundation systems subjected to machinery generated vibrations and methods of foundation isolation. Earthquake causes, magnitude and intensity, seismic hazard evaluation, NEHRP site classification, site response analyses and ground motion amplification, liquefaction and response of earth structures.

0101	Mohamed Aggour	Seats (Total: 25)
	Th 5:00pm - 7:30pm	CSI 1115

ENCE799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Majors only. Other majors require permission of department.

Contact department for information to register for this course.

ENCE898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENCE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Majors only. Other majors require permission of department.

Contact department for information to register for this course.

ENCH Engineering, Chemical Fall 2020

ENCH608 **Research in Chemical Engineering**

(Perm req)

Credits: 1 Grading Method: Regular

Students gain experience in research through lab rotations and experience presenting their findings.

Contact department for information to register for this course.

ENCH609 **Graduate Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

0101	Taylor Woehl	Seats (Total: 35)
	Tu 11:00am - 12:00pm	ONLINE

ENCH610 **Chemical Engineering Thermodynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CHBE301; and CHBE302. Or students who have taken courses with comparable content may contact the department. Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

Advanced application of the general thermodynamic methods to chemical engineering problems. First and second law consequences; estimation and correlation of thermodynamic properties; phase and chemical reaction equilibria.

0101	Mikhail Anisimov	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	ONLINE

ENCH620 **Methods of Engineering Analysis**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MATH246; and CHBE250. Or students who have taken courses with comparable content may contact the department. Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

Application of selected mathematical techniques to the analysis and solution of engineering problems; included are the applications of matrices, vectors, tensors, differential equations, integral transforms, and probability methods to such problems as unsteady heat transfer, transient phenomena in mass transfer operations, stagewise processes, chemical reactors, process control, and nuclear reactor physics.

0101	Nam Sun Wang TuTh 5:00pm - 6:15pm	Seats (Total: 35) ONLINE

ENCH648 **Special Problems in Chemical Engineering**

(Perm req)

Credits: 1-16

Grading Method: Regular, Audit

Contact department for information to register for this course.

ENCH648C **Special Problems in Chemical Engineering; Control of Air Pollution Sources**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

0101	Akua Asa-Awuku TuTh 12:30pm - 1:45pm	Seats (Total: 8) ONLINE

ENCH648E **Special Problems in Chemical Engineering; Heterogeneous Catalysis for Energy Applications**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

0101	Dongxia Liu MWF 9:00am - 9:50am	Seats (Total: 11) ONLINE

ENCH648F **Special Problems in Chemical Engineering; The Science and Technology of Colloidal Systems**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: CHBE424 and CHBE426. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Introduction to colloidal systems and interfacial science. Topics include preparation, stability and coagulation kinetics of colloidal suspensions. Introduction to DLVO theory, electrokinetic phenomena, colloidal aggregation, interfacial phenomena, double layer theory, surface chemistry. Discussion of interfacial thermodynamics and interfacial forces for solid-liquid interfaces. Applications to nanomaterial synthesis, nanomaterial and polymer self-assembly, protein-protein interactions, and protein aggregation will be discussed.

0101	Taylor Woehl MWF 11:00am - 11:50am	Seats (Total: 10) ONLINE

ENCH648K **Special Problems in Chemical Engineering; Electrochemical Energy Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Paul Albertus TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE

ENCH648P **Special Problems in Chemical Engineering; Protein Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Amy Karlsson MW 9:00am - 10:15am	Seats (Total: 7) ONLINE

ENCH648W **Special Problems in Chemical Engineering; Transport Phenomena in Small and Biological Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Panagiotis Dimitrakopoulos MW 5:00pm - 6:15pm	Seats (Total: 10) ONLINE

ENCH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENCH898 **Pre-Candidacy Research**

(Perm req) Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENCH899 **Doctoral Dissertation Research; Chemical Engineering**

(Perm req) Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENCO Engineering, Cooperative Education — Fall 2020

ENCO099 **Co-Op/Intern Work Experience**

(Perm req) Credits: 0 Grading Method: Sat-Fail

Participation in a cooperative education (co-op) or internship program enables students to apply the theories that they have learned in their traditional classes with paid, supervised, career-related work experience that develops technical and professional work skills. Contact the Engineering Co-op & Career Services Office.

If dropping course, see Withdrawal and Refund of Fees - Special Refund Deadlines in the Financial Information section of the Schedule of Classes.

0101	Heidi Sauber, Veronica Perrigan	Seats (Total: 200)
	Contact instructor or department for details.	

ENEB Embedded Systems & Internet of Things — Fall 2020

ENEB302 **Analog Circuits**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in PHYS260 and PHYS261; and 1 course with a minimum grade of C- from (MATH246, MATH241, MATH240); and permission from the Embedded Systems & Internet of Things program required. Restriction: Must be in the Embedded Systems & Internet of Things program.

Foundations of circuits, focusing on applications including signal amplification, power amplification, instrumentation and filters. Fundamental concepts of analog circuits including analysis methods in time and complex domains, with emphasis on circuit topologies relevant in embedded systems. Intensive application of simulations and hands-on laboratory exercises.

ESG1	Wesley Lawson	Seats (Total: 20)	
	MW 3:00pm - 4:15pm	ONLINE	
	F 1:00pm - 3:50pm	ONLINE	Lab
	Restricted to ESIOT students at Shady Grove.		

ENEB340 **Intermediate Programming Concepts and Applications for Embedded Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Completion of approved introductory programming course with a minimum grade of a "C-"; and permission of the Embedded Systems & Internet of Things program required. Restriction: Must be in the Embedded Systems & Internet of Things program.

Principles of programming for embedded systems development. Includes principles of software development in Unix, C and other high level languages, input/output, data types and variables, operators and expressions, program selection, repetition, functions, arrays, strings, introduction to algorithms, software projects, debugging, documentation. Includes hands-on applications in microprocessor environments.

ESG1	Wesley Lawson	Seats (Total: 20)	
	MW 2:00pm - 2:50pm	ONLINE	
	F 10:00am - 12:50pm	ONLINE	Lab
	Restricted to ESIOT students at Shady Grove.		

ENEB341 **Introduction to Internet of Things**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission from the Embedded Systems & Internet of Things program. Restriction: Must be in the Embedded Systems & Internet of Things program.

An introduction to the foundations of Internet of Things (IoT), including IoT devices, communications, connection considerations, back-end services/applications, and business models. This course looks at the IoTs as the general theme of physical/real-world things becoming increasingly visible and actionable via Internet and Web technologies. It also covers networking protocols and gateways, security and privacy, data analytics and cloud computing platforms.

ESG1	Yongzhang Leng	Seats (Total: 20)	
	TuTh 12:45pm - 1:55pm	ONLINE	
	Th 2:00pm - 3:50pm	ONLINE	Discussion
	Restricted to ESIOT students at Shady Grove.		

ENEB344 **Digital Logic Design for Embedded Systems**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Corequisite: ENEB340; and permission from the Embedded Systems & Internet of Things program. Restriction: Must be in the Embedded Systems & Internet of Things program.

Hands on approach on foundations of digital logic for embedded systems applications; including input/output, logic gates, Karnaugh maps, latches, flip-flops and state-machines. This course also covers design and analysis of synchronous sequential systems, implementation with PLA's, multiplexers, decoders, encoders, binary arithmetic units such as adders and subtractors, conversions between decimal and arbitrary radix numbers, especially octal, hexadecimal, and binary representations, radix and diminished radix arithmetic, and character codes.

ESG1	Jerry Wu	Seats (Total: 20)	
	Th 10:00am - 12:30pm	ONLINE	
	Tu 9:30am - 12:30pm	ONLINE	Lab
	Restricted to ESIOT students at Shady Grove.		

ENEB354 **Discrete Mathematics for Information Technology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Restriction: Must be in the Embedded System and Internet of Things program.

Foundations of discrete mathematics for information technology and embedded computing. Topics include sets, relations, functions and algorithms, proof techniques and induction, number theory, counting and combinatorics, and Graph theory.

ESG1	Yavuz Oruc	Seats (Total: 20)	
	M 10:00am - 12:30pm	ONLINE	
	Restricted to ESIOT students at Shady Grove.		

ENEE Electrical & Computer Engineering Fall 2020

ENEE101 **Introduction to Electrical & Computer Engineering**

(Perm req)

Credits: 3 Grading Method: Regular

Corequisite: MATH140. And corequisite: ENEE140 or CMSC131; or a score of 5 on the A Java AP exam; or a score of 4 or 5 on the AB Java AP exam; or satisfactory performance on the department's placement exam. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer) ; and students cannot enroll in ENEE101 and ENES100 in the same semester.

An exploration of topics within Electrical & Computer Engineering (ECE). Students will be introduced to key elements of both the Electrical Engineering and Computer Engineering curriculum, including: circuits, computing systems and software, communications and controls, electrodynamics and waves, microelectronics, signal processing, and power systems.

0101	Julius Goldhar F 12:00pm - 12:50pm MW 8:00am - 9:50am	Seats (Total: 12) ONLINE ONLINE	 Lab
0102	Julius Goldhar F 12:00pm - 12:50pm MW 10:00am - 11:50am	Seats (Total: 12) ONLINE ONLINE	 Lab
0103	Julius Goldhar F 12:00pm - 12:50pm MW 12:00pm - 1:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab
0104	Julius Goldhar F 12:00pm - 12:50pm MW 2:00pm - 3:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab
0105	Julius Goldhar F 12:00pm - 12:50pm MW 4:00pm - 5:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab
0106	Julius Goldhar F 12:00pm - 12:50pm TuTh 8:00am - 9:50am	Seats (Total: 12) ONLINE ONLINE	 Lab
0107	Julius Goldhar F 12:00pm - 12:50pm TuTh 10:00am - 11:50am	Seats (Total: 12) ONLINE ONLINE	 Lab
0108	Julius Goldhar F 12:00pm - 12:50pm TuTh 12:00pm - 1:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab
0109	Julius Goldhar F 12:00pm - 12:50pm TuTh 2:00pm - 3:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab

0110	Julius Goldhar F 12:00pm - 12:50pm TuTh 4:00pm - 5:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab

ENEE140 **Introduction to Programming Concepts for Engineers**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program; or must be in Engineering: Materials Science program.

Introduction to the programming environment: editing, compiling, UNIX, data types and variable scope; program selection, formatted/unformatted input/output, repetition, functions, arrays and strings.

0101	Tudor Dumitras Tu 9:30am - 10:45am WF 8:00am - 8:50am	Seats (Total: 12) ONLINE ONLINE	 Discussion
0102	Tudor Dumitras Tu 9:30am - 10:45am WF 9:00am - 9:50am	Seats (Total: 12) ONLINE ONLINE	 Discussion
0103	Tudor Dumitras Tu 9:30am - 10:45am WF 10:00am - 10:50am	Seats (Total: 12) ONLINE ONLINE	 Discussion
0104	Tudor Dumitras Tu 9:30am - 10:45am WF 11:00am - 11:50am	Seats (Total: 12) ONLINE ONLINE	 Discussion
0105	Tudor Dumitras Tu 9:30am - 10:45am WF 1:00pm - 1:50pm	Seats (Total: 12) ONLINE ONLINE	 Discussion
0106	Tudor Dumitras Tu 9:30am - 10:45am WF 2:00pm - 2:50pm	Seats (Total: 12) ONLINE ONLINE	 Discussion
0107	Tudor Dumitras Tu 9:30am - 10:45am WF 3:00pm - 3:50pm	Seats (Total: 12) ONLINE ONLINE	 Discussion

ENEE150 **Intermediate Programming Concepts for Engineers**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Permission of ENGR-Electrical & Computer Engineering department. And ENEE140 or CMSC131; or score of 5 on the A Java AP exam; or score of 4 or 5 on the AB Java AP exam; or satisfactory performance on the department's placement exam. Corequisite: MATH140. Restriction: Must be in Engineering: Electrical program. Credit only granted for: ENEE114 or ENEE150. Formerly: ENEE114.

Advanced programming concepts: coding conventions and style; pointers; dynamic memory allocation and data structures; linked lists; graphs; abstract data types; object-oriented design. There will be team-based software projects and group presentations.

0101	Donald Yeung TuTh 11:00am - 12:15pm F 9:00am - 9:50am	Seats (Total: 12) ONLINE ONLINE	 Discussion
0102	Donald Yeung TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 12) ONLINE ONLINE	 Discussion
0103	Donald Yeung TuTh 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 14) ONLINE ONLINE	 Discussion
0104	Donald Yeung TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 14) ONLINE ONLINE	 Discussion

ENEE200 **Technology and Consequences: Engineering, Ethics, and Humanity**

Credits: 3 Grading Method: Regular CORE: IE General Education: DSHU, SCIS

What makes a technology socially responsible? At UMD, the Fearless Ideas campaign asks us to aim our enthusiasm for technology at big real problems. At the same time, we are coming to appreciate the increasingly complex nature of technological systems as they become integrated into all forms of infrastructure, we realize they may be unpredictable, interdependent on social and biological systems, and have unintended consequences. In this midst of this complexity, people make decisions with far reaching impacts. How then do we follow our passion for technology and innovation but also stay skeptical in a way that allows us to consider the potential and shortcomings of technology? Designed for both engineering and non-engineering students wishing to explore and assess the impact of engineering technology on society and the role of society in generating that technology.

0101	Logan Williams Class time/details on ELMs F 9:00am - 10:15am	Seats (Total: 18) ONLINE ONLINE	Discussion
0102	Logan Williams Class time/details on ELMs F 10:30am - 11:45am	Seats (Total: 18) ONLINE ONLINE	Discussion
0103	Logan Williams Class time/details on ELMs F 12:00pm - 1:15pm	Seats (Total: 18) ONLINE ONLINE	Discussion
0104	Logan Williams Class time/details on ELMs F 1:30pm - 2:45pm	Seats (Total: 18) ONLINE ONLINE	Discussion
0105	Logan Williams Class time/details on ELMs F 3:00pm - 4:15pm	Seats (Total: 18) ONLINE ONLINE	Discussion
0201	Nicole Mogul Class time/details on ELMs F 9:00am - 10:15am	Seats (Total: 18) ONLINE ONLINE	Discussion
0202	Nicole Mogul Class time/details on ELMs F 10:30am - 11:45am	Seats (Total: 18) ONLINE ONLINE	Discussion
0203	Nicole Mogul Class time/details on ELMs F 12:00pm - 1:15pm	Seats (Total: 18) ONLINE ONLINE	Discussion
0204	Nicole Mogul Class time/details on ELMs F 1:30pm - 2:45pm	Seats (Total: 18) ONLINE ONLINE	Discussion
0205	Nicole Mogul Class time/details on ELMs F 3:00pm - 4:15pm	Seats (Total: 18) ONLINE ONLINE	Discussion

ENEE205 **Electric Circuits**

(Perm req) Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in PHYS260; and minimum grade of C- in PHYS261; and permission of ENGR-Electrical & Computer Engineering department. Corequisite: MATH246. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Credit only granted for: ENEE204 or ENEE205. Formerly: ENEE204.

Design, analysis, simulation, construction and evaluation of electric circuits. Terminal Relationships. Kirchoff's laws. DC and AC steady state analysis. Node and mesh methods. Thevenin and Norton equivalent circuits. Transient behavior of first- and second-order circuits. Frequency response and transfer functions. Ideal op-amp circuits. Diode and transistor circuits.

0101	Romel Gomez	Seats (Total: 12)	
	MW 2:00pm - 3:15pm	ONLINE	
	F 12:00pm - 1:50pm	AVW 1356	Lab
	F 11:00am - 11:50am	AVW 1356	Discussion
0102	Romel Gomez	Seats (Total: 12)	
	MW 2:00pm - 3:15pm	ONLINE	
	Tu 9:00am - 10:50am	AVW 1356	Lab
	Tu 8:00am - 8:50am	AVW 1356	Discussion
0103	Romel Gomez	Seats (Total: 12)	
	MW 2:00pm - 3:15pm	ONLINE	
	W 9:00am - 10:50am	AVW 1356	Lab
	W 8:00am - 8:50am	AVW 1356	Discussion
0104	Romel Gomez	Seats (Total: 12)	
	MW 2:00pm - 3:15pm	ONLINE	
	Th 9:00am - 10:50am	AVW 1356	Lab
	Th 8:00am - 8:50am	AVW 1356	Discussion
0105	Romel Gomez	Seats (Total: 12)	
	MW 2:00pm - 3:15pm	ONLINE	
	W 12:00pm - 1:50pm	AVW 1356	Lab
	W 11:00am - 11:50am	AVW 1356	Discussion
0201	Wesley Lawson	Seats (Total: 10)	
	TuTh 9:30am - 10:45am	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Class time/details on ELMs	ONLINE	Discussion

0202	Wesley Lawson	Seats (Total: 8)	
	TuTh 9:30am - 10:45am	ONLINE	
	M 3:00pm - 4:50pm	AVW 1356	Lab
	M 2:00pm - 2:50pm	AVW 1356	Discussion
0203	Wesley Lawson	Seats (Total: 8)	
	TuTh 9:30am - 10:45am	ONLINE	
	W 3:00pm - 4:50pm	AVW 1356	Lab
	W 2:00pm - 2:50pm	AVW 1356	Discussion
0205	Wesley Lawson	Seats (Total: 10)	
	TuTh 9:30am - 10:45am	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Class time/details on ELMs	ONLINE	Discussion

ENEE222 **Elements of Discrete Signal Analysis**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH141; and permission of ENGR-Electrical & Computer Engineering department. And minimum grade of C- in ENEE140; or minimum grade of C- in CMSC131. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Credit only granted for: ENEE222, ENEE241, or MATH242. Formerly: ENEE241.

Discrete-time and continuous-time signals, sampling. Linear transformers, orthogonal projections. Discrete Fourier Transform and its properties. Fourier Series. Introduction to discrete-time linear filters in both time and frequency domains.

0101	Gilmer Blankenship	Seats (Total: 25)	
	MW 12:30pm - 1:45pm	ONLINE	
	Tu 9:00am - 9:50am	ONLINE	Lab
	Th 9:00am - 9:50am	ONLINE	Discussion
0102	Gilmer Blankenship	Seats (Total: 25)	
	MW 12:30pm - 1:45pm	ONLINE	
	Tu 10:00am - 10:50am	ONLINE	Lab
	Th 10:00am - 10:50am	ONLINE	Discussion
0201	Adrianos Papamarcou	Seats (Total: 25)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	W 9:00am - 9:50am	ONLINE	Lab
	F 9:00am - 9:50am	ONLINE	Discussion

0202	Adrianos Papamarcou	Seats (Total: 25)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	W 10:00am - 10:50am	ONLINE	Lab
	F 10:00am - 10:50am	ONLINE	Discussion

ENEE244 **Digital Logic Design**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in CMSC132 or ENEE150; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Sophomore standing or higher; and must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

The design and analysis of combinational and synchronous sequential systems comprising digital logic gates and flip-flop memory devices; underlying tools such as switching and Boolean algebras and Karnaugh map simplification of gate networks; design and use of decoders, multiplexers, encoders, adders, registers, counters, sequence recognizers, programmable logic arrays (PLAs), read-only memories (ROMS, PROMS), and similar devices. Arbitrary radix conversion.

Engineering College only (04).

0101	Gang Qu	Seats (Total: 12)	
	MW 11:00am - 12:15pm	ONLINE	
	Th 9:00am - 9:50am	ONLINE	Discussion
0102	Gang Qu	Seats (Total: 12)	
	MW 11:00am - 12:15pm	ONLINE	
	Th 10:00am - 10:50am	ONLINE	Discussion
0103	Gang Qu	Seats (Total: 12)	
	MW 11:00am - 12:15pm	ONLINE	
	Th 11:00am - 11:50am	ONLINE	Discussion
0104	Gang Qu	Seats (Total: 12)	
	MW 11:00am - 12:15pm	ONLINE	
	Th 12:00pm - 12:50pm	ONLINE	Discussion
0105	Gang Qu	Seats (Total: 12)	
	MW 11:00am - 12:15pm	ONLINE	
	Th 1:00pm - 1:50pm	ONLINE	Discussion

0106	Gang Qu MW 11:00am - 12:15pm Th 2:00pm - 2:50pm	Seats (Total: 12) ONLINE ONLINE	 Discussion
0201	Pramod Govindan TuTh 2:00pm - 3:15pm M 9:00am - 9:50am	Seats (Total: 12) ONLINE ONLINE	 Discussion
0202	Pramod Govindan TuTh 2:00pm - 3:15pm M 10:00am - 10:50am	Seats (Total: 12) ONLINE ONLINE	 Discussion
0203	Pramod Govindan TuTh 2:00pm - 3:15pm M 11:00am - 11:50am	Seats (Total: 12) ONLINE ONLINE	 Discussion
0204	Pramod Govindan TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 12) ONLINE ONLINE	 Discussion
0205	Pramod Govindan TuTh 2:00pm - 3:15pm M 1:00pm - 1:50pm	Seats (Total: 12) ONLINE ONLINE	 Discussion
0206	Pramod Govindan TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 12) ONLINE ONLINE	 Discussion

ENEE245 **Digital Circuits and Systems Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE244. And minimum grade of C- in ENEE150; or minimum grade of C- in CMSC132. And permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Introduction to basic measurement techniques and electrical laboratory equipment (power supplies, oscilloscopes, voltmeters, etc.). Design, construction, and characterization of digital circuits containing logic gates, sequential elements, oscillators, and digital integrated circuits. Introduction to digital design and simulation with the Verilog Hardware Description Language (HDL).

0101	Manoj Franklin M 10:00am - 10:50am M 2:00pm - 4:50pm	Seats (Total: 12) ONLINE AVW 1324	Lab
0102	Manoj Franklin M 10:00am - 10:50am Tu 8:00am - 10:50am	Seats (Total: 12) ONLINE AVW 1324	Lab
0103	Manoj Franklin M 10:00am - 10:50am W 11:00am - 1:50pm	Seats (Total: 12) ONLINE AVW 1324	Lab
0104	Manoj Franklin M 10:00am - 10:50am Th 11:00am - 1:50pm	Seats (Total: 12) ONLINE AVW 1324	Lab
0105	Manoj Franklin M 10:00am - 10:50am F 2:00pm - 4:50pm	Seats (Total: 12) ONLINE AVW 1324	Lab
0106	Manoj Franklin M 10:00am - 10:50am Tu 2:00pm - 4:50pm	Seats (Total: 12) ONLINE AVW 1324	Lab
0107	Manoj Franklin M 10:00am - 10:50am Tu 11:00am - 1:50pm	Seats (Total: 12) ONLINE AVW 1324	Lab
0108	Manoj Franklin M 10:00am - 10:50am W 8:00am - 10:50am	Seats (Total: 12) ONLINE AVW 1324	Lab

ENEE303 **Analog and Digital Electronics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Conceptual operation of transistors and diodes. Large and small signal operation of BJTs and MOSFETs. Basic transistor configurations. Logic circuits and semiconductor memory. Multi-transistor circuits including differential amplifiers and current mirrors. Frequency response.

0101	Timothy Horiuchi MW 9:30am - 10:45am F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Timothy Horiuchi MW 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0201	Martin Peckerar TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0202	Martin Peckerar TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0301	Danilo Romero TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0302	Danilo Romero TuTh 2:00pm - 3:15pm W 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

ENEE303H **Analog and Digital Electronics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Conceptual operation of transistors and diodes. Large and small signal operation of BJTs and MOSFETs. Basic transistor configurations. Logic circuits and semiconductor memory. Multi-transistor circuits including differential amplifiers and current mirrors. Frequency response.

0101	Danilo Romero TuTh 2:00pm - 3:15pm W 10:00am - 10:50am	Seats (Total: 15) ONLINE ONLINE	 Discussion

ENEE307 **Electronic Circuits Design Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Students will design and test analog and digital circuits at the transistor level. FETs and BJTs will be covered. The laboratory experiments will be tightly coordinated with ENEE303 materials.

0101	Neil Goldsman W 10:00am - 10:50am Tu 11:00am - 1:50pm	Seats (Total: 12) ONLINE Location: TBA	Lab
0102	Neil Goldsman W 10:00am - 10:50am M 11:00am - 1:50pm	Seats (Total: 12) ONLINE AVW 1330	Lab
0103	Neil Goldsman W 10:00am - 10:50am M 2:00pm - 4:50pm	Seats (Total: 12) ONLINE AVW 1330	Lab
0104	Neil Goldsman W 10:00am - 10:50am Th 11:00am - 1:50pm	Seats (Total: 12) ONLINE AVW 1330	Lab
0105	Neil Goldsman W 10:00am - 10:50am Tu 2:00pm - 4:50pm	Seats (Total: 12) ONLINE AVW 1330	Lab
0106	Neil Goldsman W 10:00am - 10:50am Th 2:00pm - 4:50pm	Seats (Total: 12) ONLINE AVW 1330	Lab
0107	Neil Goldsman W 10:00am - 10:50am F 11:00am - 1:50pm	Seats (Total: 12) ONLINE AVW 1330	Lab
0108	Neil Goldsman W 10:00am - 10:50am W 2:00pm - 4:50pm	Seats (Total: 12) ONLINE AVW 1330	Lab

ENEE313 **Introduction to Device Physics**

(Perm req) Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Credit only granted for: ENEE312 or ENEE313.

Basic physics of devices including fields in solids, crystal structure, properties of electrons and holes. Current flow in Si using drift-diffusion model. Properties of the pn junction. Properties of devices including BJTs, FETs and their physical characteristics.

0101	Agisilaos Iliadis MW 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Agisilaos Iliadis MW 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

ENEE322 **Signal and System Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH246; and minimum grade of C- in ENEE222; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Concept of linear systems, state space equations for continuous systems, time and frequency domain analysis of signals and linear systems. Fourier, Laplace and Z transforms. Application of theory to problems in electrical engineering.

ENEE majors (09090) only.

0101	Richard La MW 2:00pm - 3:15pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Richard La MW 2:00pm - 3:15pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0201	Adrianos Papamarcou TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0202	Adrianos Papamarcou	Seats (Total: 25)	
	TuTh 9:30am - 10:45am	ONLINE	
	F 12:00pm - 12:50pm	ONLINE	Discussion

ENEE322H **Signal and System Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH246; and minimum grade of C- in ENEE222; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Concept of linear systems, state space equations for continuous systems, time and frequency domain analysis of signals and linear systems. Fourier, Laplace and Z transforms. Application of theory to problems in electrical engineering.

0101	Andre Tits	Seats (Total: 15)	
	TuTh 3:30pm - 4:45pm	ANS 0408	
	M 11:00am - 11:50am	CHE 2110	Discussion

ENEE324 **Engineering Probability**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH246 and ENEE222; and permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: BMGT231, STAT400 or ENEE324. Additional information: Electrical Engineering majors may NOT substitute STAT400 for ENEE324.

Axioms of probability; conditional probability and Bayes' rules; random variables, probability distribution and densities: functions of random variables: weak law of large numbers and central limit theorem. Introduction to random processes; correlation functions, spectral densities, and linear systems. Applications to noise in electrical systems, filtering of signals from noise, estimation, and digital communications.

ENEE majors (09090) only.

0101	Prakash Narayan	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	
	F 9:00am - 9:50am	ONLINE	Discussion
0102	Prakash Narayan	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion

0201	Mark Shayman TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0202	Mark Shayman TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

ENEE350 **Computer Organization**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE244; and 1 course with a minimum grade of C- from (ENEE150, CMSC132); and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Formerly: ENEE250.

Structure and organization of digital computers. Registers, memory, control and I/O. Data and instruction formats, addressing modes, assembly language programming. Elements of system software, subroutines and their linkages.

ENEE majors (09090) only

0101	Yavuz Oruc TuTh 3:30pm - 4:45pm Tu 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Yavuz Oruc TuTh 3:30pm - 4:45pm Tu 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0201	Yavuz Oruc TuTh 12:30pm - 1:45pm W 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0202	Yavuz Oruc TuTh 12:30pm - 1:45pm W 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0301	Rajeev Barua Class time/details on ELMs Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion

0302	Rajeev Barua	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

ENEE350H **Computer Organization**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE244; and 1 course with a minimum grade of C- from (ENEE150, CMSC132); and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Formerly: ENEE250.

Structure and organization of digital computers. Registers, memory, control and I/O. Data and instruction formats, addressing modes, assembly language programming. Elements of system software, subroutines and their linkages.

For general honors students only.

0101	Rajeev Barua	Seats (Total: 15)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

ENEE380 **Electromagnetic Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and minimum grade of C- in MATH241, PHYS270, and PHYS271; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

Introduction to electromagnetic fields. Coulomb's law, Gauss's law, electrical potential, dielectric materials capacitance, boundary value problems, Biot-Savart law, Ampere's law, Lorentz force equation, magnetic materials, magnetic circuits, inductance, time varying fields and Maxwell's equations.

ENEE majors (09090) only.

0101	Danilo Romero	Seats (Total: 25)	
	MW 3:30pm - 4:45pm	ONLINE	
	Tu 9:00am - 9:50am	ONLINE	Discussion
0102	Danilo Romero	Seats (Total: 25)	
	MW 3:30pm - 4:45pm	ONLINE	
	Tu 10:00am - 10:50am	ONLINE	Discussion

0201	Yanne Chembo Class time/details on ELMs W 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0202	Yanne Chembo Class time/details on ELMs W 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

ENEE380H **Electromagnetic Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and minimum grade of C- in MATH241, PHYS270, and PHYS271; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

Introduction to electromagnetic fields. Coulomb's law, Gauss's law, electrical potential, dielectric materials capacitance, boundary value problems, Biot-Savart law, Ampere's law, Lorentz force equation, magnetic materials, magnetic circuits, inductance, time varying fields and Maxwell's equations.

0101	Danilo Romero MW 3:30pm - 4:45pm W 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

ENEE381 **Electromagnetic Wave Propagation**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE380; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

The electromagnetic spectrum: Review of Maxwell's equations; the wave equation potentials, Poynting's theorem, relationship between circuit theory and fields; propagation of electromagnetic waves in homogeneous media and at interfaces; transmission line theory, waveguides, radiation and antennas.

ENEE majors only (09090).

0101	Thomas Antonsen TuTh 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 20) ONLINE CSI 1121	 Discussion

0102	Thomas Antonsen	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	ONLINE	
	F 1:00pm - 1:50pm	ONLINE	Discussion

ENEE407 **Design & Testing of RF and Microwave Devices**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE381; and must have earned a minimum grade of regular (letter) C- in all required 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical) ; and permission of ENGR-Electrical & Computer Engineering department.

An introduction to state of the art design, and testing techniques of RF and microwave devices. Designs, simulations and layout of different devices are performed using the software package ADS (Advance Design System). The course highlights wide range of engineering applications including terrestrial microwave links, satellite communications, broadcasting, mobile communications and radar.

0101	Thomas Antonsen, Charles Turner	Seats (Total: 12)	
	Tu 11:00am - 11:50am	ONLINE	
	Th 9:30am - 12:30pm	AVW 2446	Lab

ENEE408A **Capstone Design Project:Microprocessor-Based Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS

Prerequisite: ENEE440 or permission of the instructor. This course provides a team-based experience in the design and implementation of a microprocessor-based system to solve a real-world problem. A product specification or client requirement forms the basis for the student teams development of an initial technical design specification. The team then divides into smaller groups for the parallel development of hardware and software subsystems of the product device. Upon completion and test of the various subsystems, software and hardware components are integrated into the system prototype and the system is tested and documented.

0101	William Hawkins	Seats (Total: 12)	
	Th 9:30am - 10:20am	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

ENEE408C **Capstone Design Project: Modern Digital System Design**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: ENEE 350. A real-world digital system design experience that prepares students for careers in FPGA and ASIC design. Student teams use the Verilog hardware description language together with industry-standard simulation and synthesis tools to design medium-complexity digital chips that are ultimately configured and tested on FPGAs with real-world applications. Results from these projects will be presented through in-class presentations and written reports.

0101	Shuvra Bhattacharyya	Seats (Total: 16)	
	Class time/details on ELMs	ONLINE	
	Th 2:00pm - 4:50pm	ONLINE	Lab

ENEE408E **Capstone Design Project: Optical System Design**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite(s): ENEE 380. Corequisite(s): ENEE 381. The purpose of this course is to teach optical analysis and design techniques by reference to the performance of many different optical components and systems. Attention will be given to real world design in terms of component selection, optimization, and integration into systems

0101	Christopher Davis	Seats (Total: 30)	
	MW 11:00am - 12:15pm	ONLINE	

ENEE408I **Capstone Design Project: Autonomous Control of Interacting Robots**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: ENEE322; Electrical or Computer Engineering seniors in their last semester. Co-requisite: ENEE460 or ENEE463. The course involves students in the design,development, and application of autonomous robotic systems.The robots are 4 wheeled vehicles with on-board sensors (cameras, acoustic sensors),computers and wireless communications capabilities. The students work in teams to program the the robots to accomplish a task individually and in teams of 2 or more robots. Applications vary from semester to semester, including racing with passing, soccer, search and identify.

0101	Gilmer Blankenship	Seats (Total: 15)	
	M 10:00am - 10:50am	ONLINE	
	W 11:00am - 1:50pm	ONLINE	Lab

ENEE408K **Capstone Design Project; Electric Cars**

(Perm req)

Credits: 3 Grading Method: Regular

Culmination of prior course work in electrical and computer engineering. Utilization of modern design tools and methodologies for the design of components or systems under realistic constraints, with particular emphasis on teamwork and oral/written communication. Areas in which projects are currently offered include: microprocessor-based systems, digital systems, VLSI design (both digital and mixed-signal), and optical systems.

Prerequisites: ENEE303, Electrical or Computer Engineering seniors in their last year of their program. Recommended co-requisite: ENEE476 or ENEE475. Restriction: Permission of Electrical & Computer Engineering. A capstone course on the design of electric cars, which will be designedwith the objective to participate in the Formula SAE racing competition.This is a system level design course, which will eventually use a combination of off-the-shelf components. The major components inside theelectric car include lectric motor, power inverter, drive circuit, battery management system, sensors and encoders etc. This course will also discuss level simulation of electric vehicle along with the electrical components in Autonomie software.

0101	Apurv Kumar Yadav	Seats (Total: 30)	
	M 12:00pm - 12:50pm	ONLINE	
	MW 5:00pm - 6:15pm	CSI 1115	Lab

ENEE411 **Advanced Analog and Digital Electronics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer) ; and must have permission of the department. Credit only granted for: ENEE411 or ENEE419A. Formerly: ENEE419A.

Examination of analog and digital device models for analysis, design, and simulation of transistor level electronic circuits, emphasizing Metal Oxide Silicon Field Effect Transistors (MOSFETs); fundamental single transistor configurations; frequency response, feedback, and stability of multi-transistor circuits, such as current mirrors, differential amplifiers, voltage references, operational amplifiers and data converters; complementary Metal Oxide Silicon (CMOS) implementations of static and clocked digital as well as mixed signal circuits.

0101	Pamela Abshire	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

ENEE416 **Integrated Circuit Fabrication Laboratory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303; and must have earned a minimum grade of regular (letter) C- in all required 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Formerly: ENEE419J.

Characterization of wafers and fabrication steps. Oxide growth, lithography, dopant diffusion, and metal deposition and patterning will be discussed in the lectures and carried out in the lab in fabricating NMOS transistor circuits. The transistor characteristics will be measured and related to the fabrication parameters.

0101	Kevin Daniels Th 11:00am - 12:15pm Tu 9:00am - 12:00pm	Seats (Total: 5) ONLINE KEB 2300	 Lab
0102	Kevin Daniels Th 11:00am - 12:15pm W 12:30pm - 3:30pm	Seats (Total: 5) ONLINE KEB 2300	 Lab
0103	Kevin Daniels Th 11:00am - 12:15pm M 12:30pm - 3:30pm	Seats (Total: 5) ONLINE KEB 2300	 Lab
0104	Kevin Daniels Th 11:00am - 12:15pm W 9:00am - 12:00pm	Seats (Total: 5) ONLINE KEB 2300	 Lab
0105	Kevin Daniels Th 11:00am - 12:15pm F 9:00am - 12:00pm	Seats (Total: 5) ONLINE KEB 2300	 Lab

ENEE420 **Communication Systems**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE324; and completion of all lower-division technical courses in the EE curriculum.

Fourier series, Fourier transforms and linear system analysis; random signals, autocorrelation functions and power spectral densities; analog communication systems: amplitude modulation, single-sideband modulation, frequency and phase modulation, sampling theorem and pulse-amplitude modulation; digital communication systems pulse-code modulation, phase-shift keying, differential phase shift keying, frequency shift keying; performance of analog and digital communication systems in the presence of noise.

ENEE majors (09090) only.

0101	Mark Shayman TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE

ENEE425 **Digital Signal Processing**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE322; and completion of all lower-division technical courses in the EE curriculum.

Sampling as a modulation process; aliasing; the sampling theorem; the Z-transform and discrete-time system analysis; direct and computer-aided design of recursive and nonrecursive digital filters; the Discrete Fourier Transform (DFT) and Fast Fourier Transform (FFT); digital filtering using the FFT; analog-to-digital and digital-to analog conversion; effects of quantization and finite-word-length arithmetic.

ENEE majors (09090) only.

0101	Carol Espy-Wilson	Seats (Total: 30)	
	MW 11:00am - 12:15pm	ONLINE	

ENEE428 **Communications Design Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

EE capstone design course. Exploring the signal processing and communication systems theoretical concepts presented in ENEE 420 Communication Systems and ENEE 425 Digital Signal Processing by implementing them on actual DSP based hardware in real time.

Prerequisite: ENEE324; Corequisite: ENEE425 or ENEE420. This course explores the signal processing and communication system theoretical concepts presented in ENEE 322 Signals and Systems, ENEE 324 Engineering Probability, ENEE 420 Communication Systems, and ENEE 425 Digital Signal Processing by implementing them on actual hardware in real time. In the process, students gain experience using equipment commonly used in industry, such as, oscilloscopes, spectrum analyzers, error rate test sets, channel simulators, digital signal processors, analog-to-digital and digital-to-analog converters, and signal generators. The experiments are based on using a Texas Instruments TMS320C6713 DSP Starter Kit (DSK) stand-alone board that communicates with the PC through a USB port.

0101	Steven Tretter	Seats (Total: 8)	
	W 10:00am - 10:50am	ONLINE	
	W 2:00pm - 5:00pm	ONLINE	Lab

ENEE429C **Topics in Communications; Modern Communication Systems Design Laboratory**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in communications.

Restrictions: Permission of Department Required. Credit granted for ENEE429C or ENEE428. This course will explore the theoretical concepts on signal processing and communication systems by implementing them on actual hardware in real time using DSP and software-defined radio (SDR). Analog communications and digital filter designs will be implemented using Texas Instruments TMS320C6713 DSP Starter Kit (DSK). Digital communication systems will be implemented using Ettus Research s USRP B210 SDR Kit.

Contact department for information to register for this course.

ENEE436 **Foundations of Machine Learning**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (ENEE324, STAT400); and 1 course with a minimum grade of C- from (ENEE150, CMSC216); and permission of ENGR-Electrical & Computer Engineering department. Restriction: Permission of ENGR-Electrical & Computer Engineering department. And must be in one of the following programs (Engineering: Electrical; Engineering: Computer) ; or must be in the ECE Department's Machine Learning notation program. Credit only granted for: ENEE436, ENEE439M, or CMSC422. Formerly: ENEE439M.

A a broad introduction to the foundations of Machine Learning (ML), as well as hands-on experience in applying ML algorithms to real-world data sets. Topics include various techniques in supervised and unsupervised learning, as well as applications to computer vision, data mining, and speech recognition.

0101	Joseph JaJa	Seats (Total: 30)
	MW 5:00pm - 6:15pm	ONLINE

ENEE440 **Microprocessors**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE350; and completion of all lower division technical courses in the EE curriculum. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Microprocessor architectures, instruction sets, and applications. Bus structures, memory, I/O interfacing. Assembly language programming, LSI device configuration, and the embedding of microprocessors in systems.

ENEE majors only (09090).

0101	William Hawkins	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ONLINE

ENEE445 **Computer Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; or minimum grade of C- in ENEE206. And minimum grade of C- in ENEE350; and must have earned a minimum grade of regular (letter) C- in all 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

This laboratory course focuses on the hardware/software interface in computer systems. Hand-on experiments are used to teach design, construction, analysis, and measurement of both hardware and software for embedded systems. Projects emphasize using microcontrollers for control, sensing, and communication through various I/O devices.

0101	William Hawkins	Seats (Total: 12)	
	Tu 12:30pm - 1:20pm	ONLINE	
	Th 2:00pm - 5:00pm	ONLINE	Lab

ENEE446 **Digital Computer Design**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE350; and completion of all lower-division technical courses in the EE curriculum. Restriction: Permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: ENEE446 or CMSC411.

Hardware design of digital computers. Arithmetic and logic units, adders, multipliers and dividers. Floating-point arithmetic units. Bus and register structures. Control units, both hardwired and microprogrammed. Index registers, stacks, and other addressing schemes. Interrupts, DMA and interfacing.

ENEE majors (09090) only.

0101	Manoj Franklin	Seats (Total: 60)
	MW 2:00pm - 3:15pm	ONLINE

ENEE456 **Cryptography**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: (CMSC106, CMSC131, or ENEE150; or equivalent programming experience); and (2 courses from (CMSC330, CMSC351, ENEE324, or ENEE380); or any one of these courses and a 400-level MATH course, or two 400-level MATH courses). Or permission of instructor. Also offered as: CMSC456, MATH456. Credit only granted for: MATH456, CMSC456 or ENEE456.

The theory, application, and implementation of mathematical techniques used to secure modern communications. Topics include symmetric and public-key encryption, message integrity, hash functions, block-cipher design and analysis, number theory, and digital signatures.

0101	Jeffrey Adams MWF 11:00am - 11:50am	Seats (Total: 50) ONLINE	
0201	William Gasarch MW 3:30pm - 4:45pm	Seats (Total: 85) ONLINE	

ENEE457 **Computer Systems Security**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE350; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer) ; and permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: CMSC414, ENEE459C or ENEE457. Formerly: ENEE459C.

Theoretical and practical aspects of computer systems security. Topics covered include symmetric/asymmetric encryption, message authentication, digital signatures, access control, as well as network security, web security and cloud security. Students acquire tools necessary for designing secure computer systems and programs and for defending against malicious threats (e.g., viruses, worms, denial of service).

0101	Dana Dachman-Soled MW 11:00am - 12:15pm	Seats (Total: 60) ONLINE	

ENEE459A **Topics in Computer Engineering; CAD Tools**

(Perm req)

Credits: 1 Grading Method: Regular

Selected topics of current importance in computer engineering.

Prerequisite: ENEE245. Verilog or VDHL hardware description languages (HDLs) and graphical printed ciruit design CAD packages are used to create a digital system implemented on a printed circuit-board. A practical design for hardware incorporating a processor and interface devices is to be created by the student. Simulation is used to explore practical issues of system performance and device resource constraints, and a printed-circuit board proof-of-concept will be produced by the student.

0101	William Hawkins Tu 9:30am - 10:20am Class time/details on ELMs	Seats (Total: 12) ONLINE ONLINE	 Discussion

ENEE459B **Topics in Computer Engineering; Reverse Engineering and Hardware Security Laboratory**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in computer engineering.

Prequisite: ENEE244, ENEE245, and ENEEE350 or permission of the instructor.

0101	Gang Qu	Seats (Total: 24)	
	Tu 5:00pm - 6:15pm	ONLINE	
	Th 5:00pm - 7:00pm	ONLINE	Lab
0102	Gang Qu	Seats (Total: 24)	
	Tu 5:00pm - 6:15pm	ONLINE	
	W 5:00pm - 7:00pm	ONLINE	Lab

ENEE459D **Topics in Computer Engineering; Advanced Laboratory of Digital Systems Using SystemsVerilog**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in computer engineering.

Prerequisites: Completion of ENEE245 and ENEE350 with a "C-" or better. SystemVerilog programming expertise is considered an essential skill for any Functional Design/Verification job in the semi- conductor industry and there is a huge demand for such jobs. This course will help students to develop theoretical and practical skills for both design & verification of ASIC/FPGA using SystemVerilog. In this course, you will learn the main features and benefits of the SystemVerilog language and apply the concepts by developing your own test environments.

0101	Pramod Govindan	Seats (Total: 10)	
	Tu 9:30am - 10:45am	ONLINE	
	F 9:00am - 11:50am	AVW 1442	Lab

ENEE460 **Control Systems**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE322; and completion of all lower-division technical courses in the EE curriculum. Restriction: Must be in Engineering: Electrical program.

Mathematical models for control system components. Transform and time domain methods for linear control systems. Introductory stability theory. Root locus, bode diagrams and Nyquist plots. Design specifications in the time and frequency domains. Compensation design in the time and frequency domain. Introduction to sampled data systems.

ENEE majors (09090) only.

0101	Eyad Abed	Seats (Total: 30)
	MW 3:30pm - 4:45pm	ONLINE

ENEE474 **Power Systems**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE322; and completion of all lower-division technical courses in the EE curriculum.

Interconnected power systems, transmission lines, load flow studies, unit commitment and economic dispatch. Three phase networks, machine models. Symmetrical components, fault analysis and unbalanced operation. Power system transients, stability and numerical methods in power system analysis.

0101	Isaak Mayergoyz	Seats (Total: 75)
	Class time/details on ELMs	ONLINE

ENEE476 **Renewable Energy**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303; and completion of all lower-divisions ENEE courses with a C- or better. Restriction: Permission of ENGR-Electrical & Computer Engineering department; and must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Credit only granted for: ENEE419R or ENEE476. Formerly: ENEE419R.

Solar Energy Conversion Systems: History of Photovoltaic (PV) Systems, PV Cell, Module and Array Models and Equivalent Circuits, Characteristic Resistance, Fill Factor, Effects of Parasitic Resistances, Mismatch Effects, Shading, Bypass Diodes, Sun Tracking Systems, Maximum Power Point Tracking (MPPT) Techniques, Isolated and Non-isolated Switch-mode DC/DC for PV Systems, Inverter Design and Control, Sizing the PV Panel and Battery Pack in PV Applications. Wind Energy Conversion Systems: Introduction to Wind Energy Harvesting, Horizontal and Vertical Wind Systems, Fundamentals of Wind Energy Harvesting Systems, Variable Speed and Fixed Speed Wind Energy Conversion Systems (WECS), Wind Turbines and Different Electrical Machines in Wind Applications, Induction Machine and Dynamic Model of Induction Machines, Synchronous Generators and Dynamic Model of SG, Control of Wind Energy Conversion Systems.

Alternating face-to-face/online meeting. See instructor for details.

0101	Shiladri Chakraborty	Seats (Total: 60)
	MW 3:30pm - 4:45pm	IRB 0324
	Class time/details on ELMs	ONLINE

ENEE488 **Independent Study in Electrical and Computer Engineering**

(Perm req) Credits: 1-3 Grading Method: Regular

The purpose is to provide students with an opportunity for independent study projects on advanced electrical and computer engineering topics. These projects typically involve academic investigations of technical themes that are not addressed in the established elective and special topics courses taught by the department on a regular basis. Study plans are tailored to students educational goals but are approved and supervised by faculty.

Prerequisite: permission of department.

1201	Romel Gomez Contact instructor or department for details.	Seats (Total: 5)
1301	Perinkulam Krishnaprasad Contact instructor or department for details.	Seats (Total: 3)
1501	William Levine Contact instructor or department for details.	Seats (Total: 3)
1801	Robert Newcomb Contact instructor or department for details.	Seats (Total: 3)
2801	Donald Yeung Contact instructor or department for details.	Seats (Total: 3)
5301	Julius Goldhar Contact instructor or department for details.	Seats (Total: 5)
5601	Jonathan Simon he--him Contact instructor or department for details.	Seats (Total: 10)
6101	Howard Milchberg Contact instructor or department for details.	Seats (Total: 10)
6501	Yasser Shoukry Contact instructor or department for details.	Seats (Total: 5)
6901	Neil Goldsman Contact instructor or department for details.	Seats (Total: 3)
7001	Wesley Lawson Contact instructor or department for details.	Seats (Total: 5)
9801	Jeremy Munday Contact instructor or department for details.	Seats (Total: 10)

ENEE489B **Topics in Electrophysics; Introduction to Quantum Technology**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Selected topics of current importance in electrophysics.

Prerequisite: MATH141 and MATH240 or equivalent. Recommended: Students need not have taken a course on quantum mechanics; however, students should be comfortable with: probability theory, Markov chains, complex numbers, quantum states, measurements, unitary operations, matrix algebra, Pauli matrices, the tensor product, waves, the harmonic oscillator, the quantum harmonic oscillator, and the Schrodinger equation. Cross-listed with ENEE489B Credit granted for PHYS467 or ENEE489B. Investigates the physical systems used to implement quantum computers. Covers basics of atomic clocks, laser interferometers, quantum key distribution, quantum networks, and three types of qubits (ion-based, superconductor-based, and semiconductor-based).

0101	James Williams	Seats (Total: 40)
	TuTh 9:30am - 10:45am	PHY 1410
	Class time/details on ELMs	ONLINE

ENEE489I **Topics in Electrophysics; SOLAR ENERGY CONVERSION**

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrophysics.

0101	Cheng Gong	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ONLINE

ENEE489N **Topics in Electrophysics; Antenna Design**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrophysics.

Prerequisites: ENEE381. Restriction: Permission of Electrical & Computer Engineering Department. A senior level hands-on course to expose students to the principles of antenna design and methods for generation and reception of GHz signals. The course includes theory and computer modeling, as well as fabrication and testing of small scale antennas used in naval communication systems. The course builds upon the concepts of electromagnetic wave introduced in ENEE381. Students will learn the state of the art in microwave instrumentation and techniques, along with simulation tools based on geometry. Students will analyze and test several prototype antenna configurations.

Contact department for information to register for this course.

ENEE490 **Physical Principles of Wireless Communications**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE381. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Credit only granted for: ENEE490 or ENEE498B. Formerly: ENEE498B.

0101	Wesley Lawson	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ONLINE

ENEE498E **Topics in Electrical Engineering; Exploring Internet of Things (IoT) Technologies**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrical engineering.

An exploration of technologies related to the Internet of Things (IoT). These technologies form an ecosystem of web-enabled hardware and software that use embedded systems, such as processors, sensors, and communication hardware to collect, send, and act on the data that they acquire from their environments. This course will introduce the student to the components of the IoT: 1) smart devices and censors - device connectivity, 2) IoT gateway (networks and protocols), 3) cloud computing, 4) data analytics, and 5) user interface. Practical applications will be implemented using Raspberry pi and Microsoft Azure.

Contact department for information to register for this course.

ENEE498M **Topics in Electrical Engineering; Mathematical Methods in Electrical Engineering**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrical engineering.

Prerequisite: Completion of MATH241 with a "C-" or better; completion of all 200-level ENEE courses. A fundamental understanding of applied mathematical techniques that are essential for solving problems in various fields of electrical and computer engineering. The topics that will be covered are complex variables/analysis, linear algebra, Laplace and Fourier transforms, discrete math, and differential equations. The emphasis is on the application of these mathematical tools to problems that students encounter in the upper-division electrical and computer engineering courses. Computational tools such as Wolfram Alpha and MATLAB will be introduced.

0101	Danilo Romero	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	ONLINE

ENEE499 **Senior Projects in Electrical and Computer Engineering**

(Perm req)

Credits: 1-5 Grading Method: Regular

The purpose is to provide students with an opportunity to engage in independent research projects on advanced electrical and computer engineering topics. Projects are selected by students and supervised by faculty and other qualified mentors. While students may be required to acquire new skills or information in the course of completing a 499 project, the focus is to conduct an independent investigation of a technical theme by the student. The project may be used to satisfy the advanced lab requirement if it is approved as a primarily - experimental research project. In that case, the student will enroll in ENEE499L.

ENEE majors (09090) only.

Contact department for information to register for this course.

ENEE499L **Senior Projects in Electrical and Computer Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular

The purpose is to provide students with an opportunity to engage in independent research projects on advanced electrical and computer engineering topics. Projects are selected by students and supervised by faculty and other qualified mentors. While students may be required to acquire new skills or information in the course of completing a 499 project, the focus is to conduct an independent investigation of a technical theme by the student. The project may be used to satisfy the advanced lab requirement if it is approved as a primarily - experimental research project. In that case, the student will enroll in ENEE499L.

Contact department for information to register for this course.

ENEE499R **Senior Projects in Electrical and Computer Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular

The purpose is to provide students with an opportunity to engage in independent research projects on advanced electrical and computer engineering topics. Projects are selected by students and supervised by faculty and other qualified mentors. While students may be required to acquire new skills or information in the course of completing a 499 project, the focus is to conduct an independent investigation of a technical theme by the student. The project may be used to satisfy the advanced lab requirement if it is approved as a primarily - experimental research project. In that case, the student will enroll in ENEE499L.

Contact department for information to register for this course.

ENEE600 **Solid State Electronics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE413; and must have background in elementary quantum mechanics. Credit only granted for: ENEE600 or ENEE793. Formerly: ENEE793.

Properties of crystals; energy bands: electron transport theory; conductivity and hall effect; statistical distributions; fermi level: impurities; non-equilibrium carrier distributions; normal modes of lattice vibration and thermal properties of crystals; tunneling phenomena; surface properties.

0101	Agisilaos Iliadis MW 2:00pm - 3:15pm	Seats (Total: 25) ONLINE
0102	Agisilaos Iliadis Class time/details on ELMs	Seats (Total: 15) ONLINE

ENEE605 **Design and Fabrication of Micro-Electro-Mechanical Systems (MEMS)**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENEE605 or ENEE719R. Formerly: ENEE719R.

The goals are to explore the world of Micro-Electro-Mechanical Systems (MEMS) by understanding its design and fabrication aspects.

Alternating face-to-face/ online class meeting. Please see instructor for details.

0101	Reza Ghodssi TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 15) CHE 2110 ONLINE

ENEE610 **Electrical Network Theory**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed undergraduate-level Circuit Theory; or permission of instructor.

Matrix algebra, network elements, ports, passivity and activity, geometrical and analytical descriptions of networks, state variable characterizations, scattering matrices, signal flow graphs, sensitivity.

0101	Robert Newcomb TuTh 3:30pm - 4:45pm	Seats (Total: 30) ONLINE
0102	Robert Newcomb Class time/details on ELMs	Seats (Total: 15) ONLINE

ENEE620 **Random Processes in Communication and Control**

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: ENEE324; or students who have taken courses with comparable content may contact the department.

Introduction to random processes: characterization, classification, representation; Gaussian and other examples. Linear operations on random processes, stationary processes: covariance function and spectral density. Linear least square waveform estimating Wiener-Kolmogroff filtering, Kalman-Bucy recursive filtering: function space characterization, non-linear operations on random processes.

0101	Alexander Barg	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0102	Alexander Barg	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

ENEE623 **Digital Communications**

Credits: 3

Grading Method: Regular,
Audit

Recommended: ENEE420.

Review of sampling and quantization, functional characterization of digital signals and transmission facilities, band-limited signals and systems. Digital modulation/demodulation techniques, error probability, intersymbol interference and its effects, adaptive equalization. Signaling with coded waveforms, fading and satellite channels, multiple access problems and protocols. Introduction to spread-spectrum Communications.

0101	Sennur Ulukus	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ONLINE

ENEE630 **Advanced Digital Signal Processing**

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: ENEE425. Corequisite: ENEE620. Credit only granted for: ENEE624 or ENEE630. Formerly: ENEE624.

This is the first-year graduate course in signal processing. The objective is to establish fundamental concepts of signal processing on multirate processing, parametric modeling, linear prediction theory, modern spectral estimation, and high-resolution techniques.

0101	KJ Ray Liu	Seats (Total: 40)	
	MW 3:30pm - 4:45pm	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion
0102	KJ Ray Liu	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

ENEE633 **Statistical Pattern Recognition**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH461; or students who have taken courses with comparable content may contact the department; or permission of instructor. Corequisite: ENEE620; or permission of instructor. Credit only granted for: ENEE633 or ENEE739Q. Formerly: ENEE739Q.

The goal is to introduce mathematical pattern analysis and recognition. Emphasis is given to parametric and non-parametric statistical pattern recognition methods and clustering with applications to speech, image and video recognition.

0101	Behtash Babadi	Seats (Total: 90)	
	MW 11:00am - 12:15pm	ONLINE	

ENEE641 **Mathematical Foundations for Computer Engineering**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENEE641 or ENEE759F. Formerly: ENEE759F.

Mathematical modeling, design, analysis and proof techniques related to computer engineering. Probability, logic, combinatorics, set theory, and graph theory, as they pertain to the design and performance of computer engineering systems. Techniques for the design and analysis of efficient computational methods from graph theory and networks. Understanding of the limits on the efficiency of such computational methods. Translation from mathematical theory to actual programming. The course emphasizes mathematical rigor.

0101	Uzi Vishkin	Seats (Total: 50)	
	MW 12:30pm - 1:45pm	ONLINE	
0102	Uzi Vishkin	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	

ENEE646 **Digital Computer Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE446; or students who have taken courses with comparable content may contact the department.

Concepts and techniques for design of computer systems with improved performance. Advanced I/O systems, memory organization, pipeland and parallel processors, bus bandwidth, processor/memory interconnections, cache memory, virtual memory, multiprocessors, performance evaluation.

0101	Bruce Jacob TuTh 2:00pm - 3:15pm	Seats (Total: 35) IRB 1116
0102	Bruce Jacob Class time/details on ELMs	Seats (Total: 15) ONLINE

ENEE660 **System Theory**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE460 and MATH463; or students who have taken courses with comparable content may contact the department.

General systems models. State variables and state space. Linearity and its implications. Controllability and observability. State space structure and representation. Realization theory and algorithmic solutions. Parameterizations of linear systems; canonical forms. Basic results from stability theory. Stabilizability. Fine structure of linear multivariable systems; minimal indices and polynomial matrices. Interplay between frequency domain and state space.

0101	John Baras TuTh 3:30pm - 4:45pm	Seats (Total: 30) ONLINE

ENEE662 **Convex Optimization**

Credits: 3 Grading Method: Regular, Audit

Recommended: MATH410. Credit only granted for: ENEE759F or ENEE662.

Focuses on recognizing, solving, and analyzing convex optimization problems. Convex sets, convex functions, convex and quasi-convex optimization problems. Duality theory and optimality conditions. Specific classes of problems including linear optimization (LP), semi-definite optimization (SDP), geometric programming. Algorithms for unconstrained and constrained optimization; interior-point methods. Applications in controls, communications, signal processing, statistics, and other areas.

0101	Nuno Martins MW 2:00pm - 3:15pm	Seats (Total: 30) ONLINE
0102	Nuno Martins Class time/details on ELMs	Seats (Total: 30) ONLINE

ENEE680 **Electromagnetic Theory I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE381; or students who have taken courses with comparable content may contact the department.

Theoretical analysis and engineering applications of Maxwell's equations: boundary value problems of electrostatics and magnetostatics, dielectric and magnetic properties of matter, energy and momentum content of fields, introduction to EM wave propagation.

0101	Phillip Sprangle MW 3:30pm - 4:45pm	Seats (Total: 25) ONLINE
0102	Phillip Sprangle Class time/details on ELMs	Seats (Total: 15) ONLINE

ENEE690 **Quantum and Wave Phenomena with Electrical Application**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE381; or students who have taken courses with comparable content may contact the department.

Introduction of quantum and wave phenomena from electrical engineering point of view. Topics included: general principles of quantum mechanics, operator algebra, the microwave resonant cavity and the analagous potential well problem, harmonic oscillator, hydrogenic atom. Perturbation method applied to the transmission line and potential well problems. Periodically loaded transmission line and Kronig-Penny model of band theory.

0101	Mohammad Hafezi TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE
0102	Mohammad Hafezi Class time/details on ELMs	Seats (Total: 10) ONLINE

ENEE698E **Graduate Seminar; Microelectronics**

Credits: 1-2 Grading Method: Sat-Fail, Audit

Every semester regular seminars are held in electrical science and in the six areas of specialization offered by the electrical engineering department. They may be taken, by arrangement with the student's advisor, for repeated credit.

0101	Robert Newcomb Tu 5:00pm - 5:50pm	Seats (Total: 20) ONLINE

ENEE698Q **Graduate Seminar; Colloquium Series**

Credits: 1 Grading Method: Sat-Fail

Every semester regular seminars are held in electrical science and in the six areas of specialization offered by the electrical engineering department. They may be taken, by arrangement with the student's advisor, for repeated credit.

0101	Joseph JaJa F 3:30pm - 4:30pm	Seats (Total: 80) ONLINE
0102	Joseph JaJa Class time/details on ELMs	Seats (Total: 30) ONLINE

ENEE699 **Independent Studies in Electrical Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Supervised individual study or project, or supervised group study or project, at an advanced level, in electrical engineering.

Contact department for information to register for this course.

ENEE704 **Physics and Simulation of Semiconductor Devices**

Credits: 3 Grading Method: Regular, Audit

Recommended: ENEE601 and ENEE600; and exposure to quantum mechanics. Credit only granted for: ENEE694 and ENEE704. Formerly: ENEE694.

The physics of electron transport in semiconductor devices will be covered. Numerical methods for attaining solutions to transport equations will be explored. Students will also learn how to use CAD tools fro semiconductor device design. Nano-electronic devices will be introduced.

0101	Neil Goldsman	Seats (Total: 30)
	MW 12:30pm - 1:45pm	ONLINE

ENEE729A **Advanced Topics in Communication; Coding Theory and Applications**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Cross-listed with CMSC818K. Credit only granted for CMSC818K or ENEE729A. Restricted MS/PhD students in CMSC, AMSC, or ENEE. Introduction to Coding Theory with an emphasis on essential constructions and algorithms.

0101	Alexander Barg	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

ENEE762 **Stochastic Control**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE620 and ENEE660; or students who have taken courses with comparable content may contact the department.

Stochastic control systems, numerical methods for the Ricatti equation, the separation principle, control of linear systems with Gaussian signals and quadratic cost, non-linear stochastic control, stochastic stability, introduction to stochastic games.

0101	Perinkulam Krishnaprasad	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	ONLINE

ENEE789O **Advanced Topics in Electrophysics**

Credits: 3 Grading Method: Regular, Audit

Topics selected, as announced every semester, from the field of electrophysics and its applications.

0101	Edward Ott	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

ENEE789W **Advanced Topics in Electrophysics; Incubating Quantum Leaps**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Topics selected, as announced every semester, from the field of electrophysics and its applications.

Prerequisite: ENEE690 or Permission of ENGR-Electrical & Computer Engineering department. A guided investigation and seminar course on potentially transformative applications of quantum technology. Students work in teams to explore the research landscape across disciplines of interest, in order to assess promising new approaches for interdisciplinary, translational, pre- start- up, and/or start-up- ready quantum technology.

0101	Ronald Walsworth	Seats (Total: 30)
	MW 11:00am - 12:15pm	ONLINE

ENEE791 **Quantum Electronics II**

Credits: 3 Grading Method: Regular, Audit

Nonlinear optical effects and devices, tunable coherent light sources: optical parametric oscillator; frequency conversion and dye laser. Ultrashort pulse generation and measurement, stimulated raman effect, and applications. Interaction of acoustic and optical waves, and holography.

0101	Thomas Murphy	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	CSI 1115

ENEE799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENEE889 **Teaching Workshop**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Provide training in education for senior PhD students who contemplate an academic career, and give them the opportunity to gain some teaching experience. Emphasis is on issues that are of special importance in electrical and computer engineering education.

Contact department for information to register for this course.

ENEE898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Provide training in education for senior PhD students who contemplate an academic career, and give them the opportunity to gain some teaching experience. Emphasis is on issues that are of special importance in electrical and computer engineering education.

Contact department for information to register for this course.

ENEE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENES Engineering Science Fall 2020

ENES100 **Introduction to Engineering Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSSP

Corequisite: MATH140.

Students work as teams to design and build a product using computer software for word-processing, spreadsheet, CAD, and communication skills.

Supplemental in-person active learning opportunities will be available to students who choose to complete their coursework on campus. These experiences will provide opportunities to utilize makerspaces and to work in small groups with other students.

0301	W Ethan Eagle MW 10:00am - 11:50am Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0302	Wesley Lawson MW 10:00am - 11:50am Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0401	Jackelyn Lopez Roshwalb TuTh 10:00am - 11:50am Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0402	W Ethan Eagle TuTh 10:00am - 11:50am Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0501	Isabel Lloyd MW 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE

0502	Brian Danielak MW 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0601	Jackelyn Lopez Roshwalb TuTh 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0602	Patrick McAvoy TuTh 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0701	Peter Sunderland MW 2:00pm - 3:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0702	Michael Galczynski MW 2:00pm - 3:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0801	Brian Danielak TuTh 2:00pm - 3:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE
0802	David Kriesberg TuTh 2:00pm - 3:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 39) ONLINE ONLINE

ENES102 **Mechanics I**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Corequisite: MATH140. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering. Formerly: ENES110.

The equilibrium of stationary bodies under the influence of various kinds of forces. Forces, moments, couples, equilibrium, trusses, frames and machines, centroids, moment of inertia, beams, friction, stress/strain, material properties. Vector and scalar methods are used to solve problems.

Supplemental in-person active learning opportunities will be available to students who choose to complete their coursework on campus. These experiences will provide opportunities to utilize makerspaces and to work in small groups with other students.

0101	Aris Cleanthous MW 9:00am - 9:50am F 9:00am - 10:50am	Seats (Total: 60) ONLINE ONLINE	 Discussion
0102	Aris Cleanthous MW 11:00am - 11:50am F 11:00am - 12:50pm	Seats (Total: 60) ONLINE ONLINE	 Discussion
0103	Jarred Young MW 12:00pm - 12:50pm F 12:00pm - 1:50pm	Seats (Total: 60) ONLINE ONLINE	 Discussion
0104	Jarred Young MW 2:00pm - 2:50pm F 2:00pm - 3:50pm	Seats (Total: 60) ONLINE ONLINE	 Discussion

ENES102H **Mechanics I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: MATH140. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering. Formerly: ENES110.

The equilibrium of stationary bodies under the influence of various kinds of forces. Forces, moments, couples, equilibrium, trusses, frames and machines, centroids, moment of inertia, beams, friction, stress/strain, material properties. Vector and scalar methods are used to solve problems.

Supplemental in-person active learning opportunities will be available to students who choose to complete their coursework on campus. These experiences will provide opportunities to utilize makerspaces and to work in small groups with other students.

0101	Gary Pertmer MW 9:00am - 9:50am F 9:00am - 10:50am	Seats (Total: 60) ONLINE ONLINE	 Discussion

0201	Michael Galczynski	Seats (Total: 60)	
	MW 12:00pm - 12:50pm	ONLINE	
	F 12:00pm - 1:50pm	ONLINE	Discussion

ENES113 **Virtus Living and Learning Community Seminar I**

Credits: 1 Grading Method: Regular

Restriction: Must be in first year Virtus program.

The seminar focuses on personal and professional development related to the field of engineering with a strong emphasis on clarifying career goals and decisions. Additional topics include an introduction to basic tools, undergraduate research opportunities, and campus and engineering resources.

0101	Joshua Cocker, Jarred Young	Seats (Total: 65)
	W 4:00pm - 5:30pm	ONLINE

ENES115 **FLEXUS Living and Learning Community Seminar I**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be a first year FLEXUS Participant.

The seminar focuses on personal and professional development related to the field of engineering with a strong emphasis on clarifying career goals and decisions. Additional topics include an introduction to campus and engineering resources, basic tools, and undergraduate research opportunities. Students will discuss issues of concern through a variety of book readings, self-reflections, and panel discussions with practicing women engineers.

0101	Laura Paquin, Lauren Healy	Seats (Total: 65)
	W 4:00pm - 5:30pm	ONLINE

ENES140 **Discovering New Ventures**

Credits: 3 Grading Method: Regular General Education: DSSP

Additional information: This course may count as an elective for a student at the University of Maryland, depending on the student's specific degree program. It cannot be counted towards the requirements for the Smith School of Business Entrepreneurship Fellow Program.

Students explore dynamic company startup topics by working in teams to design a new venture. This multi-disciplinary course helps students to learn the basic business, strategy, and leadership skills needed to launch new ventures. Topics include learning how to assess the feasibility of a startup venture, as well as how to apply best practices for planning, launching, and managing new companies. Students discuss a wide range of issues of importance and concern to entrepreneurs and learn to recognize opportunities, assess the skills and talents of successful entrepreneurs, and learn models that help them navigate uncertainty.

0101	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0201	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0301	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0401	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0501	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0601	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0701	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0801	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
FC01	Michael Pratt MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 139) ONLINE

ENES150 **Transfer LEAD Seminar I**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Restriction: Eligible external transfer students in the A. James Clark School of Engineering; and permission of instructor.

This seminar focuses on personal and professional development for transfer students in the A. James Clark School of Engineering. Transfer LEAD is a program for Engineering transfer students with four main outcomes: Learn, Educate, Adapt, Direct. Topics covered in this course include campus resources, student identity development, leadership development, and student outreach. Students will learn educational theory in order to develop a sense of leadership as students in the Clark School of Engineering.

0101	Shannon Buenaflor	Seats (Total: 10)
	M 4:00pm - 5:50pm	ONLINE

ENES181 **Engineering & The Grand Challenges**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; and must be a new freshman or transfer student.

Introduction to the various fields of engineering and the necessary context for students to fully engage in selected National Academy of Engineering's Grand Challenges such as economical solar energy, carbon sequestration, access to clean water, engineering better medicines, restoring urban infrastructure and personalized learning. The lectures and activities will provide an introduction to the engineering disciplines, NAE Grand Challenges, STEM cultures, and research.

0101	Robert Briber	Seats (Total: 100)
	W 4:00pm - 4:50pm	ONLINE

ENES190H **Introduction to Design and Quality**

Credits: 4 Grading Method: Regular General Education: DSSP

Prerequisite: Must be in the Quest program. Cross-listed with BMGT190. Credit only granted for: BMGT190 or ENES190.

QUEST students learn and apply design practices to design new products and services. Working in multidisciplinary teams, students use quality and process improvement methods to identify, analyze, and recommend solutions to real-world problems.

First course in a sequence of four Total Quality Program Courses. Restricted to QUEST Honors Program students. Cross-listed with ENES190H.

A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE): http://ter.ps/iamFEARLESS Click here for more information on the Fearless Ideas Courses.

0101	Pamela Armstrong TuTh 12:30pm - 1:45pm Class time/details on ELMs Tu 6:00pm - 7:50pm	Seats (Total: 45) ONLINE ONLINE VMH 1335	 Discussion

ENES210 **Entrepreneurial Opportunity Analysis and Decision-Making in 21st Century Technology Ventures**

Credits: 3 Grading Method: Regular CORE: IE General Education: DSSP, SCIS

Credit only granted for: ENES210 or ENES461.

This multi-disciplinary course helps students learn the principles of entrepreneurial opportunity analysis and decision-making in an increasingly dynamic and technically-inclined society. Emphasis is placed on how aspiring technology entrepreneurs can develop their entrepreneurial perspectives to develop winning entrepreneurial plans for their future ventures.

0101	James Green Class time/details on ELMs M 9:00am - 9:50am	Seats (Total: 120) ONLINE ONLINE
0201	James Green Class time/details on ELMs M 10:00am - 10:50am	Seats (Total: 120) ONLINE ONLINE
0301	James Green Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 120) ONLINE ONLINE
0401	James Green Class time/details on ELMs M 2:00pm - 2:50pm	Seats (Total: 120) ONLINE ONLINE
0501	James Green Class time/details on ELMs W 9:00am - 9:50am	Seats (Total: 120) ONLINE ONLINE
0601	James Green Class time/details on ELMs W 10:00am - 10:50am	Seats (Total: 120) ONLINE ONLINE

0701	James Green Class time/details on ELMs M 1:00pm - 1:50pm	Seats (Total: 120) ONLINE ONLINE
0801	James Green Class time/details on ELMs W 1:00pm - 1:50pm	Seats (Total: 120) ONLINE ONLINE

ENES213 **Virtus Living and Learning Community Seminar III**

(Perm req)

Credits: 1 Grading Method: Regular General Education: DVCC

Prerequisite: ENES113. Restriction: Must be a participant in the second year of the Virtus program.

The seminar focuses on personal, academic and professional success by cultivating leadership skills, developing academic and technical ability and encouraging self awareness, identifying and employing strategies for academic and professional success, further enhancing career development through networking and mentoring and developing awareness of diversity issues.

0101	Kurubel Belay Th 4:00pm - 5:30pm	Seats (Total: 45) ONLINE

ENES215 **FLEXUS Living and Learning Community Seminar III**

(Perm req)

Credits: 1 Grading Method: Regular General Education: DVCC

Prerequisite: ENES115 and ENES116. Restriction: Must be a second year FLEXUS participant.

The seminar focuses on personal, academic and professional success by cultivating leadership skills, developing self-confidence and self-efficacy in academic and technical ability and encouraging self awareness, identifying and employing strategies for academic and professional success, further enhancing career development through networking, mentoring and role modeling, and developing awareness of diversity issues, specifically gender diversity.

0101	Julia Anderson, Samantha Sabihi Th 4:00pm - 5:30pm	Seats (Total: 49) ONLINE

ENES220 **Mechanics II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in ENES102; and (MATH141 and PHYS161). Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; and must not be in Engineering: Electrical program.

Stress and deformation of solids-rods, beams, shafts, columns, tanks, and other structural, machine and vehicle members. Topics include stress transformation using Mohr's circle; shear and moment diagrams; derivation of elastic curves; and Euler's buckling formula. Design problems related to this material are given in lab.

Supplemental in-person active learning opportunities will be available to students who choose to complete their coursework on campus. These experiences will provide opportunities to utilize makerspaces and to work in small groups with other students.

0101	Thomas Beigel MW 9:00am - 9:50am F 9:00am - 10:50am	Seats (Total: 60) ONLINE ONLINE	 Discussion
0201	Mary Bowden MW 12:00pm - 12:50pm F 12:00pm - 1:50pm	Seats (Total: 60) ONLINE ONLINE	 Discussion
0301	Robert Bonenberger MW 10:00am - 10:50am F 10:00am - 11:50am	Seats (Total: 60) ONLINE ONLINE	 Discussion
0401	Thomas Beigel MW 2:00pm - 2:50pm F 2:00pm - 3:50pm	Seats (Total: 60) ONLINE ONLINE	 Discussion
0501	Robert Bonenberger MW 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 60) ONLINE ONLINE	 Discussion
0601	Thomas Beigel MW 11:00am - 11:50am F 11:00am - 12:50pm	Seats (Total: 60) ONLINE ONLINE	 Discussion

ENES221 **Dynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ENES102; and (MATH141 and PHYS161). Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

Systems of heavy particles and rigid bodies at rest and in motion. Force-acceleration, work-energy and impulse-momentum relationships. Motion of one body relative to another in a plane and in space.

0101	Ken Kiger MW 10:00am - 10:50am F 10:00am - 11:50am	Seats (Total: 55) ONLINE Location: TBA	Discussion
0103	Peter Sandborn MW 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 55) ONLINE Location: TBA	Discussion
0104	Patrick McAvoy MW 12:00pm - 12:50pm F 12:00pm - 1:50pm	Seats (Total: 55) ONLINE Location: TBA	Discussion
0105	Kevin Calabro MW 2:00pm - 2:50pm F 3:00pm - 4:50pm	Seats (Total: 55) ONLINE Location: TBA	Discussion

ENES232 **Thermodynamics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS261 and PHYS260. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering. Credit only granted for: BIOE232, CHBE301, ENCH300, ENES232, ENME320, or ENME232. Formerly: ENME232 and ENME320.

Introduction to thermodynamics. Thermodynamic properties of matter. First and second laws of thermodynamics, cycles, reactions, and mixtures.

0101	Catherine Hamel MW 9:00am - 9:50am F 9:00am - 10:50am	Seats (Total: 60) ONLINE Location: TBA	Discussion
0301	Catherine Hamel MW 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 60) ONLINE Location: TBA	Discussion

ENES304 **RISE Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Must be in the Engineering RISE Leadership Program; and permission of ENGR-A. James Clark School of Engineering.

This is the first semester of a two semester sequence taken by RISE students in their first semester in the program. T he purpose of ENES 304 is for RISE students to learn about leadership, acquire leadership skills, and understand how to integrate leadership theories and concepts in engineering practice. There will be a mix of formal lectures by course faculty and lectures by distinguished speakers who can provide their own experience of what leadership means and how it is acquired. Students will explore their own leadership philosophy and leadership capacities in the context of group practice. Students will make meaning of general leadership theories and concepts and understand how to apply them to engineering industry. Students will also gain understanding of leadership through the stories shared by distinguished speakers with industrial, governmental and academic experience.

0101	Ramsey Jabaji, William Fourney, Ken Kiger	Seats (Total: 17)
	Tu 5:00pm - 5:50pm	ONLINE

ENES317 **Introduction to Engineering Leadership**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Prerequisite: Permission of ENGR-A. James Clark School of Engineering.

Focus is placed on general leadership theories in addition to real-world applications of leadership in engineering education, industry, and government.

Restricted to students in the Engineering Leadership Development minor (#EN04) and the Global Engineering Leadership minor (#EN09). Students must contact Dr. Natasha Chapman (chapman3@umd.edu) for permission to enroll in this course.

0101	Darren Pierre	Seats (Total: 45)
	Class time/details on ELMs	ONLINE

ENES390H **Designing Innovative Systems**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES190 or BMGT190. Restriction: Must be in the QUEST program. Cross-listed with BMGT390. Credit only granted for: BMGT390 or ENES390.

QUEST students develop an understanding of complex systems that incorporate elements of business and technical design and analyze how these systems evolve over time and may be shaped by technology disruptions, internal decisions, and external forces. Students apply these concepts to real-world complex systems in a team environment.

Restricted to QUEST Honors Program students. Cross-listed with BMGT390H.

0101	David Ashley, Joseph Bailey TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 55) VMH 1333 ONLINE

ENES397 **Mentoring Multidisciplinary Teams**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Restricted to QUEST Program (TQMP) students. Also offered as: BMGT397. Credit only granted for: BMGT397 or ENES397.

QUEST students practice essential skills for mentoring and coaching multidisciplinary teams. These include effective communications, facilitation, conflict resolution, and the ability to motivate. Students will practice these skills as mentors for student teams from BMGT/ENES 190H. In the process, they will strengthen their knowledge of design and quality techniques.

0101	Pamela Armstrong Tu 5:00pm - 7:40pm	Seats (Total: 9) VMH 1415

ENES424 **Engineering Leadership Capstone**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES472, ENCE320, and ENES317; and permission of ENGR-A. James Clark School of Engineering. Recommended: ENES100.

The work initiated in the Introduction to Engineering Leadership course brings together further exploration of leadership styles and concepts.

Restricted to students with a minor in Engineering Leadership Developmen t.

0101	Lena Kavaliauskas Crain Tu 5:00pm - 6:30pm Class time/details on ELMs	Seats (Total: 30) ONLINE ONLINE

ENES440 **Science, Technology and Society: Certificate Program Capstone**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Science, Technology and Society certificate program; or permission of ENGR-A. James Clark School of Engineering. Credit only granted for: ENES440 or UNIV401. Formerly: UNIV401.

Capstone research seminar for students in the Science, Technology and Society certificate program.

0101	David Tomblin	Seats (Total: 10)
	Contact instructor or department for details.	

ENES460 **Fundamentals of Technology Start-Up Ventures**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Maryland Technology Enterprise Institute. Credit only granted for: ENES460, BMGT461, SMLP470 or HLMN470. Additional information: Course may not be used to fulfill any BMGT major or minor program requirement.

Fundamental aspects of creating, organizing, funding, managing, and growing a technology startup venture. This multidisciplinary course will draw on management, business, legal, financial, as well as technical, concepts. Students form teams and develop a business plan for a technology company, based on each team's own business idea and then present the plan to a panel of outside experts.

0101	James Green, Michael Pratt	Seats (Total: 40)
	TuTh 5:00pm - 6:15pm	ONLINE
	Restricted to students in the Hinman CEOs Program	

ENES461 **Advanced Entrepreneurial Opportunity Analysis in Technology Ventures**

Credits: 3 Grading Method: Regular

Credit only granted for: ENES210 or ENES461.

Explores the factors that influence entrepreneurial opportunity analysis in technology-based ventures. Uses a cognitive theoretical framework to examine the integration of motivation, emotions and information processing modes to make complex entrepreneurial decisions in technology venture environments.

0101	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
0201	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE

ENES463 **Strategies for Managing Innovation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Maryland Technology Enterprise Institute. Credit only granted for: ENES463, BMGT467, SMLP473 or HLMN472. Additional information: Course may not be used to fulfill any BMGT major or minor program requirement.

Emphasizes how the technology entrepreneur can use strategic management of innovation and technology to enhance firm performance. Examines the process of technological change, the ways that firms come up with innovations, the strategies that firms use to benefit from innovation, and the process of formulating technology strategy. Provides frameworks for analyzing key aspects of these industries and teaches students how to apply these frameworks.

0101	Thomas Mierzwa	Seats (Total: 41)
	Class time/details on ELMs	ONLINE

ENES467 **Engineering for Social Change**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must not be in Engineering: Mechanical program; and junior standing or higher; and must be in a major in ENGR-A. James Clark School of Engineering. Cross-listed with ENME467. Credit only granted for: ENES467 or ENME467.

Critical analysis of issues at the intersection of engineering, philanthropy and social change. How engineering design, products and processes have created social change in the past and will do so in the future through both intended and unintended consequences. Topics covered include energy, sustainability and climate change, autonomy, the digital future, low cost engineering, manufacturing, philanthropy, ethics and the impact of electronics on society, among others. Faculty and external experts will engage with students on these topics. Students will broadly engage with organizations involved in using technology for positive social impact.

Cross-listed with ENES467. Credit granted for ENME467 or ENES467. Class will be held off campus at 7878b Diamondback Drive, which is behind The Hotel on Route 1.

0101	Davinder Anand, Sami Ainane	Seats (Total: 45)
	F 11:00am - 1:40pm	ONLINE

ENES472 **International Business Cultures in Engineering and Technology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Prerequisite: Permission of ENGR-A. James Clark School of Engineering. Restriction: Sophomore standing or higher. Credit only granted for: ENES472, SLLC471, or SLLC473.

The goal is to provide students with an understanding of cultural aspects pertaining to global business and engineering and develop the cultural understanding, attitudes, and communication skills needed to function appropriately within an increasingly global and multicultural working environment.

Restricted to students with the minor in international engineering (#EN01) and in engineering leadership development (#EN04). Students in global poverty (#AG06), in terrorism studies (#BS07), or in international development and conflict management (#BS02) may request permission for the course from Dr. Natasha Chapman (chapman3@umd.edu). All other students can be placed on a hold file.

0101	Brian Dillehay	Seats (Total: 45)
	Th 6:00pm - 7:30pm Class time/details on ELMs	ONLINE ONLINE

ENES480 **Engineering Honors Seminar I**

Credits: 1 Grading Method: Regular

Restriction: Must be in College of Engineering Honors; and junior standing or higher.

Introduction to engineering leadership, professionalism, and ethics. Discussions of leadership style, elements of success, professional communication, codes of ethics, handling of ethical dilemmas, and the characteristics of a professional.

0103	Wesley Lawson	Seats (Total: 20)
	Tu 8:00am - 8:50am	Location: TBA

ENES489A **Special Topics in Engineering; Applied Quantitative Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in engineering.

Restricted to QUEST Honors Program students. Credit granted for BMGT438A or ENES489A.

0101	Pamela Armstrong, Joseph Bailey	Seats (Total: 47)
	TuTh 2:00pm - 3:15pm Class time/details on ELMs	ESJ 0202 ONLINE

ENES490H **QUEST Capstone Professional Practicum**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: ENES390 or BMGT390. Cross-listed with: BMGT490. Credit only granted for: BMGT490 or ENES490.

The capstone course for the QUEST Honors Program provides students with an opportunity to learn in multidisciplinary teams of business, engineering, and science students in a real-world setting. Companies engage teams of QUEST students with real organizational challenges and dedicate resources to help students address these problems. Student teams must enhance their skills in quality management, process improvement, and systems design and will apply these to add value to a client. In the process, students will improve their teamwork skills.

Fourth course in a sequence of four Total Quality Program Courses. Restricted to QUEST Honors Program students.

0101	David Ashley, Joseph Bailey, James Purtilo	Seats (Total: 45)
	W 5:00pm - 7:40pm	VMH 1415
	Class time/details on ELMs	ONLINE

ENES491 **Scoping Experiential Learning Projects**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BMGT190 or ENES190. Restriction: Restricted to QUEST Program (TQMP) students. Cross-listed with BMGT491. Credit only granted for: BMGT491 or ENES491.

QUEST students cultivate relationships with new and current corporate partners and prepare project scopes for QUEST's introductory course, BMGT/ENES 190H, and capstone course, BMGT/ENES 490H. Requires independent work communicating with clients and class visits to a variety of potential project sites.

Cross-listed with BMGT491.

0101	Jessica Roffe	Seats (Total: 9)
	W 1:00pm - 3:00pm	ONLINE
	Class time/details on ELMs	ONLINE

ENES602 **Future Faculty Program Seminar II**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Restriction: Must be in the Clark School Future Faculty Program.

Effective teaching techniques. Basic principles of education and learning. Developing a course; promoting active learning, problem solving and critical thinking; designing exam and assignments; and communicating effectively with students.

This course is only open to students in the Clark School Future Faculty Program or by permission of Department.

0101	Amy Karlsson	Seats (Total: 25)
	M 2:00pm - 3:15pm	ONLINE

ENES604 **Future Faculty Program Teaching Practicum**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Prerequisite: ENES602. Restriction: Must be a graduate student in the Clark School Future Faculty Program; and students for whom English is not the native language must pass the Maryland English Institute ITA Evaluation prior to enrolling in this course.

Graduate students will co-teach a course under supervision of a faculty mentor. Graudate students will be involved in all aspects of the course including development of syllabus, presenting lectures, writing and grading examiniations, and evaluating the students in the course.

0101	Min Wu	Seats (Total: 10)
	Contact instructor or department for details.	

ENES662 **Innovative Ideas and Concept Development**

Credits: 3 Grading Method: Regular

Enables aspiring entrepreneurs to understand the content, methods, and models for new venture opportunity assessment and analysis. Focuses on how to identify and analyze entrepreneurial opportunities for technology-based ventures by first understanding the personal self and decision-making factors. Explores how to evaluate new venture opportunities and challenges within industries and markets.

Must be in Technology Entrepreneurship program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PLM1	James Green	Seats (Total: 30)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE

ENES663 **Strategies for Managing Innovation**

Credits: 3 Grading Method: Regular

Credit only granted for: ENES663 or ENPM691.

Emphasizes how innovative leaders can use strategic management of innovation and technology to enhance firm performance. It helps students to understand the process of technological change; the ways that firms come up with innovations; the strategies that firms use to benefit from innovation; and the process of formulating technology strategy. It provides frameworks for analyzing key aspects of these industries and teaches students how to apply these frameworks.

Must be in Technology Entrepreneurship program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PLM1	Thomas Mierzwa	Seats (Total: 30)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE

ENES666 **Creative Design, Prototyping, and Testing**

Credits: 3 Grading Method: Regular

Prerequisite: ENES664 and ENES665.

Transition from creative, innovative, design thinking methods to prototyping and concept testing of products and services. Learn how to translate ideas into marketable offerings to create real value for customers and the new venture. Emphasis is placed on an integrated and interdisciplinary approach to engineering design, concurrent engineering, design for manufacturing, industrial design, and the business of new product development. Topics include design methods, modeling and simulation, material and manufacturing process selection, platform and modular design, mass customization, planning and scheduling, and business issues, teamwork, group dynamics, creativity, and innovation.

Restricted to students in Technology Entrepreneurship program.

Click here for program information.

PLM1	Cait von Schnetlage	Seats (Total: 30)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE

ENES667 **Market Development and Commercialization**

Credits: 3 Grading Method: Regular

Prerequisite: ENES664 and ENES665.

Provides an orientation to key marketing concepts critical to marketing technology-based products and services. Learn to identify market opportunities, understand customer preferences, evaluate market acceptance, and devise the appropriate going to market strategies for the new venture.

Restricted to students in Technology Entrepreneurship program.

Click here for program information.

PLM1	Daniel Dearing **Meets August 31, 2020 - November 20, 2020** Class time/details on ELMs	Seats (Total: 30) ONLINE

ENES672 **Launching Technology Startup Ventures**

Credits: 6 Grading Method: Regular

Prerequisite: ENES670 and ENES671. Credit only granted for: ENES660 or ENES672.

Explores the processes and skills needed to launch and manage technology startup ventures. Learn how to apply best practices for planning, launching, and leading new companies. Discusses a wide range of issues of importance and concern to entrepreneurs, to include how to navigate uncertainty.

Restricted to students in Technology Entrepreneurship program.

Click here for program information.

PLM1	Mark Komisky **Meets August 31, 2020 - November 20, 2020** Class time/details on ELMs	Seats (Total: 30) ONLINE

ENFP Engineering, Fire Protection Fall 2020

ENFP101 **Introduction to Fire Protection Engineering**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP108 or ENFP101. Formerly: ENFP108.

This course will introduce students to the impact of fire on people, property and the environment and methods to mitigate the threat of fire. Student teams will apply the principles of fire behavior and fire safety systems covered in the first half of the course to design, build and test a fire safe, small-scale apartment. A final experiment will be conducted to provide an assessment of the complete designs of each team.

0101	James Milke M 12:00pm - 12:50pm	Seats (Total: 20) ANS 0408	
0102	James Milke M 12:00pm - 12:50pm	Seats (Total: 10) ONLINE	

ENFP250 **Introduction to Life Safety Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP250 or ENFP251. Formerly: ENFP251.

Introduction to fire protection engineering and building regulation, building safety systems, and egress system design. Evacuation modeling. Human behavior in fires. Tenability Analysis.

0101	Kenneth Isman TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 54) ONLINE ONLINE	 Discussion

ENFP300 **Fire Protection Fluid Mechanics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246 and ENFP201; and must have completed or be concurrently enrolled in PHYS260, PHYS261, and ENES232. Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: BIOE331, ENCE305, ENFP300, or ENME331.

Presents students with the fundamental properties of fluids and fluid movement. Both static and dynamic fluid problems will be considered with an emphasis on fire protection systems.

0101	Fernando Raffan Montoya TuTh 11:00am - 12:15pm W 3:00pm - 3:50pm	Seats (Total: 48) ONLINE ONLINE	 Discussion

ENFP405 **Structural Fire Protection**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220. Restriction: Must be in Engineering: Fire Protection program; and permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP405 or ENFP621.

Effects of elevated temperature on structural materials; steel, concrete, wood, gypsum, glass and reinforced plastics. Experimental evaluation of fire resistance of building assemblies. Analytical methods to evaluate fire resistance of structural members.

0101	Catherine Hamel	Seats (Total: 21)
	TuTh 9:30am - 10:45am	ONLINE

ENFP410 **Special Hazard Suppression Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENFP310 and ENFP312. Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP410 or ENFP653.

Analysis of application and theory of fire suppression systems. The key elements of fire suppression systems will be discussed along with how they interact for effective fire suppression design. Physical mechanisms for a variety of fire suppression approaches will be discussed including hose streams, sprinklers, water mist, foam, clean agents, and chemical agents.

0101	Kenneth Isman	Seats (Total: 24)
	TuTh 2:00pm - 3:15pm	ONLINE

ENFP415 **Fire Dynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENFP312. Restriction: Permission of ENGR-Fire Protection Engineering department. Jointly offered with ENFP651. Credit only gran ted for: ENFP415 or ENFP651.

Designed to give students a quantitative understanding of fire behavior. The fundamentals of physics and chemistry of combustion are presented and used to derive key analytical relationships that describe fire growth. Application of these relationships to the analysis of common fire scenarios is emphasized.

0101	Stanislav Stoliarov	Seats (Total: 41)
	TuTh 11:00am - 12:15pm	ESJ 0202

ENFP425 **Enclosure Fire Modeling**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES232, ENFP300, and ENFP312. Restriction: Must be in Engineering: Fire Protection program; and senior standing; and permission of ENGR-Fire Protection Engineering department.

An introduction to enclosure fire dynamics through the development of fire modeling algorithms and the application of computer-based fire modeling techniques. The objectives of the course are: to provide a basic understanding of enclosure fire dynamics with an emphasis on a system-level viewpoint (i.e., a global description of the coupling between combustion dynamics, smoke filling, vent flows and heat transfer); and to provide an introduction to the zone modeling approach. Topics covered include a review of the mathematical formulation of zone models, a discussion of numerical integration of the zone modeling equations (using MATLAB), and an introduction to zone modeling software used by professional engineers (e.g., CFAST).

0101	Isaac Leventon	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	ONLINE

ENFP429 **Independent Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

For students who have definite plans for individual study of approved problems, or study of an advanced topic selected in conjunction with the faculty.

Senior standing. For ENFP majors only.

Contact department for information to register for this course.

ENFP440 **Smoke Management and Fire Alarm Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed with a C- or better or concurrently be enrolled in ENFP300. Restriction: Permission of ENGR-Fire Protection Engineering department. Jointly offered with ENFP627. Credi t only granted for: ENFP440 or ENFP627.

Analysis of hazard posed by smoke in buildings. Performance characteristics of smoke management systems. Review of analytical design aids. Functional analysis and design of fire detection and alerting systems. Examination and evaluation of code criteria, performance specifications and research.

0101	Michael Reardon, James Milke	Seats (Total: 49)
	TuTh 12:30pm - 1:45pm	ONLINE

ENFP464 **Industrial Fire Safety**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Students must be of senior standing. Restriction: Permission of ENGR-Fire Protection Engineering department. Also offered as: ENFP664. Credit only granted for: ENFP464, ENFP489I, ENFP629I OR ENFP664.. Formerly: ENFP489I. Additional information: The course will be taught as a dual senior-level undergraduate course and graduate course.

Designed to introduce students to the basics of process safety with a focus on the methods and techniques that may be utilized when evaluating the existing or proposed safety protection solutions in industrial facilities. An emphasis is placed on properly identifying the hazards that are present, the risk exposure, and how best to address the risk. The foundation is laid by presenting the necessary background information on industrial processes and integrating this information with applicable fire/explosion safety science.

0101	Arnaud Trouve	Seats (Total: 15)
	M 1:00pm - 2:50pm	ONLINE
	W 1:00pm - 1:50pm	ONLINE

ENFP489 **Special Topics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance to fire protection.

For ENFP majors only.

Contact department for information to register for this course.

ENFP601 **Introduction to Fire Protection Engineering**

Credits: 3 Grading Method: Regular, Audit

Additional information: Highly recommended to incoming graduate students to Fire Protection Engineering who have not earned a Bachelor's Degree in Fire Protection Engineering.

The basic concepts of life safety, water-based fire protection systems, building construction, codes and standards along with tenability, fire behavior, and human behavior are introduced along with traditional and performance-based approaches for analyzing human response to fire. Students learn to analyze the egress systems and design basic water-based fire suppression systems.

0101	Kenneth Isman	Seats (Total: 15)
	MW 4:30pm - 5:45pm	EGR 1202

ENFP611 **Fire Induced Flows**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENFP415.

Theoretical basis is presented for fire induced bouyancy driven flows. Plumes, ceiling jets, vent flows, compartment flows. Dimensional analysis for correlations and scale model applications. Smoke movement and combustion products.

0101	Andre Marshall	Seats (Total: 15)
	MW 4:30pm - 5:45pm	ONLINE

ENFP619 **Graduate Seminar**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

0101	Arnaud Trouve	Seats (Total: 5)
	Contact instructor or department for details.	

ENFP621 **Analytical Procedures of Structural Fire Protection**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENFP312. Cross-listed with ENFP621. Credit only granted for: ENFP405 or ENFP621.

Analysis procedures for structural components of wood, steel, concrete, composites. Structural capabilities, modifications under fire induced exposures. Calculations, computer models for predicting fire resistance ratings of structural components.

0101	Catherine Hamel	Seats (Total: 15)
	TuTh 9:30am - 10:45am	ONLINE

ENFP625 **Advanced Fire Modeling**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Fire Protection Engineering department.

Validity, utility, reliability of current computer models. Applications of models in risk assessment, underwriting, loss prediction, hazard analysis. Development and validation of specific application models.

0201	Arnaud Trouve	Seats (Total: 40)
	Meets September 7, 2020 - November 27, 2020	
	Class time/details on ELMs	ONLINE

ENFP626 **Computational Fire Modeling**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENFP300 and ENFP312. Restriction: Permission of ENGR-Fire Protection Engineering department.

Introduction to Computational Fluid Dynamics (CFD)-based fire modeling; governing equations of turbulent reacting flows; numerical approaches to the treatment of turbulence (DNS, LES, RANS); numerical methods for partial differential equations; physical modeling of enclosure fires (turbulence, combustion, thermal radiation, pyrolysis, suppression). Development of sample programs (Matlab) and use of current CFD-based fire models (FDS).

0101	Arnaud Trouve	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	ONLINE

ENFP627 **Smoke Detection and Management**

Credits: 3 Grading Method: Regular

Prerequisite: ENFP300. Jointly offered with ENFP440. Credit only grant ed for: ENFP627 or ENFP440.

Analysis of hazard smoke. Response analysis of smoke detectors based on characteristics of detectors and properties of smoke. Performance characteristics and limitations of smoke management systems. Capabilities and limitations of analytical design aids.

0101	Michael Reardon, James Milke	Seats (Total: 8)
	TuTh 12:30pm - 1:45pm	ONLINE

ENFP629 **Selected Topics**

(Perm req)

Credits: 3-6 Grading Method: Regular, Audit

Current research, studies in fire protection engineering. Future trends and significant changes in research, professional areas. The professional standards process.

Contact department for information to register for this course.

ENFP649 **Special Problems**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature to suit the special needs and background of students, or for individual students who have definite plans of individual study.

Prerequisite: permission of department.

Contact department for information to register for this course.

ENFP651 **Advanced Fire Dynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENFP629A or ENFP651. Formerly: ENFP629A.

A review of the basic chemistry and physics necessary to understanding fire dynamics; and of the physics of heat transfer and turbulent fluid flow will be given. The nature and structure of premixed and diffusion flames will be presented.

0101	Stanislav Stoliarov	Seats (Total: 5)
	TuTh 11:00am - 12:15pm	ESJ 0202

ENFP653 **Advanced Fire Supression**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP410, ENFP489L, ENFP653, or ENFP629C. Formerly: ENFP629C.

Issues related to the suppression of fires and the design of fire suppression systems. Theoretical aspects of fire suppression and extinction are considered to provide the foundation for the practical design of different types of fire suppression systems. Focus on water-based and "clean agent" fire suppression systems, with emphasis on high challenge and special hazard applications. Systems using other agents are introduced, but are not addressed in detail.

0101	Kenneth Isman	Seats (Total: 11)
	TuTh 2:00pm - 3:15pm	ONLINE

ENFP662 **Performance Based Design**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENFP629E or ENFP662. Formerly: ENFP629E.

This on-line course demonstrates how fire science can be used to solve fire protection problems in the built environment and will provide an understanding of their performance-based design process, deterministic and risk-based analysis techniques, development of design fire scenarios, trial design development and analysis, and building lifecycle management.

0201	Eric Rosenbaum	Seats (Total: 40)
	Meets September 7, 2020 - November 27, 2020	
	Class time/details on ELMs	ONLINE

ENFP664 **Advanced Industrial Fire Safety**

Credits: 3 Grading Method: Regular, Audit

Jointly offered with ENFP464. Credit only granted for: ENFP489I, ENFP62 9I, ENFP464, or ENFP664. Formerly: ENFP489I and ENFP629I.

This class is designed to introduce students to the basics of process safety with a focus on the methods and techniques that may be utilized when evaluating the existing or proposed safety protection solutions in industrial facilities. An emphasis is placed on properly identifying the hazards that are present, the risk exposure, and how best to address the risk. The foundation is laid by presenting the necessary background information on industrial processes and integrating this information with applicable fire/explosion safety science.

0101	Arnaud Trouve	Seats (Total: 15)
	M 1:00pm - 2:50pm	ONLINE
	W 1:00pm - 1:50pm	ONLINE

ENFP799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Development and completion of Master's Thesis.

Contact department for information to register for this course.

ENGL English Fall 2020

English as a second language classes are listed under UMEI. For more detailed course descriptions, click here to visit the English department website.

ENGL101 **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Students with a TWSE score below 33 must take ENGL 101A in place of ENGL101. Students for whom English is a second language should consider taking ENGL101X in place of ENGL101.

Click here for more course information.

0001	Benjamin Baker MWF 8:00am - 8:50am	Seats (Total: 19) ONLINE
0002	Kristine Morrissey MWF 8:00am - 8:50am	Seats (Total: 19) ONLINE
0101	William Pittman MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0102	Glorious Piner MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0103	Kristine Morrissey MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0108	Chauncey Dennie MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0201	Brian Davis MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0205	Elizabeth Nonemaker MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0206	Michael Dignan MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0208	Elizabeth Dinneny MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0303	Elizabeth Nonemaker MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE

0304	William Pittman MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0305	Sara Wilder MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0306	Fredrick Cherry Jr MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0307	Brian Davis MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0402	Lisa Latouche MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0403	Brian Davis MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0405	Sabrina Islam MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0406	Max Lasky MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0502	Brian Davis MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
0503	Claudia Rojas MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
0504	Emilee Durand MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
0505	Jonathan Reyes MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
0602	Cheryl Spinner MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
0603	Nicole Cuffy MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE

0604	Halla Khalil MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
0605	Max Lasky MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
1001	Susan Pramschufer TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
1002	Kathryn Karoly TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
1102	Melvette Davis TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1103	Kelsey Kerr TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1104	Lara Payne TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1105	Alexis Walston TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1107	Kiera Wolfe TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1203	Connor Watkins TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1204	Alannah Hensley TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1205	Chika Onyenezi TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1206	Melvette Davis TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1301	Alannah Hensley TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE

1302	Joshua Weiss TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1303	Gail Upchurch TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1304	Hannah Beilenson TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1305	Caroline Rothrock TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1307	Heather McHale TuTh 12:30pm - 1:45pm *Restricted to students in Institute of Applied Agriculture.*	Seats (Total: 0) ONLINE
1401	Joshua Weiss TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
1402	Hunter Parsons TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
1403	Kelsey Kerr TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
1404	Erica Cochran TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
1405	Maiasia Grimes TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
9001	Radford Skudrna Tu 9:30am - 10:45am Th 9:30am - 10:45am	Seats (Total: 19) ONLINE ONLINE
9002	Radford Skudrna Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 19) ONLINE ONLINE

9003	Nabila Hijazi Th 9:30am - 10:45am Tu 9:30am - 10:45am	Seats (Total: 19) ONLINE ONLINE
9004	Gerard Holmes Th 11:00am - 12:15pm Tu 11:00am - 12:15pm	Seats (Total: 19) ONLINE ONLINE
9005	David Brookshire MF 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9006	David Brookshire MF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9007	David Brookshire MF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9008	David Brookshire MF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9009	Alan Montroso MW 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9010	Alan Montroso MW 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9011	Emilee Durand MW 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9012	Katherine Joshi MW 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE

9013	Amanda Allen Tu 9:30am - 10:45am Th 9:30am - 10:45am	Seats (Total: 19) ONLINE ONLINE
9014	Amanda Allen Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 19) ONLINE ONLINE
9015	Susan Pramschufer Tu 12:30pm - 1:45pm Th 12:30pm - 1:45pm	Seats (Total: 19) ONLINE ONLINE
9016	Amanda Allen Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 19) ONLINE ONLINE
9017	John Macintosh Th 9:30am - 10:45am Tu 9:30am - 10:45am	Seats (Total: 19) ONLINE ONLINE
9018	John Macintosh Th 11:00am - 12:15pm Tu 11:00am - 12:15pm	Seats (Total: 19) ONLINE ONLINE
9019	Tom Hatcher Th 12:30pm - 1:45pm Tu 12:30pm - 1:45pm	Seats (Total: 19) ONLINE ONLINE
9020	John Macintosh Th 2:00pm - 3:15pm Tu 2:00pm - 3:15pm	Seats (Total: 19) ONLINE ONLINE
9021	Amanda Allen Tu 12:30pm - 1:45pm Th 12:30pm - 1:45pm	Seats (Total: 19) ONLINE ONLINE
9022	Gerard Holmes Th 12:30pm - 1:45pm Tu 12:30pm - 1:45pm	Seats (Total: 19) ONLINE ONLINE

FC01	Cheryl Spinner MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC02	Nia Crawford MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC03	Virginia Butler MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC04	Cheryl Spinner MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC05	Daniel Kason MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC06	Daniel Kason MW 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC07	Virginia Butler MW 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC08	Nia Crawford TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC09	Lara Payne TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC10	Paul Cote TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE

FC11	Jesse Brooks TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC12	Daune O'Brien MW 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC13	Paul Cote TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC14	Thibault Raoult TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC15	Peter Grybauskas TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC16	Zachary Frank TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC17	Radford Skudrna TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC18	Joshua Weiss TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC19	Mariko Carson MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC20	Sara Faradji MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE

FC21	Virginia Butler MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC22	Peter Grybauskas TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC23	Cheryl Spinner MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC24	Joshua Weiss TuTh 6:00pm - 7:15pm *Restricted to Freshmen Connection Students.*	Seats (Total: 19) ONLINE
FC25	Nicole Cuffy MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC26	Nicole Cuffy MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE
FC27	Mariko Carson MW 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 19) ONLINE

ENGL101A **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Students should take ENGL 101A rather than ENGL 101 if their TWSE score (a subscore of the SAT verbal) is 33 or below.

1703	Roberto Leon MWF 12:00pm - 12:50pm	Seats (Total: 15) ONLINE

ENGL101C **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Restricted to students in the Civicus Program.

0209	Robert Lucci MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0309	Cameron Mozafari MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE

ENGL101H **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

For general honors students or students with a verbal SAT of 600 or better.

0109	William Gonch MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0210	Katherine Joshi MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0310	Katherine Joshi MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0407	Katherine Joshi MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE

0507	Sabrina Islam MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
1001	Tom Hatcher TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
1107	Peter Grybauskas TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE

ENGL101S **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

This course is restricted to College Park Scholars.

0110	Nicole Cuffy MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0211	Stephanie Allen MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0212	Mike Kolakoski MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0311	Mike Kolakoski MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0312	Stephanie Allen MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0410	Mike Kolakoski MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0509	Mike Kolakoski MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE

0607	Brandee Pettus MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
1108	Gail Upchurch TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1209	Kelsey Kerr TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1210	Nabila Hijazi TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1308	Alexandra Calloway TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1401	Carol Cron TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
9001	Catherine Bayly MF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9002	Catherine Bayly MF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE

ENGL101X **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Limited to students for whom English is a second language. The following are indications that a student should register for English 101X: 1) an iBT TOEFL score of 100 overall, with a writing section score of at least 24; 2) an IELTS score of 7.0 overall, with a writing score of at least 7.0; 3) satisfactory completion of UMEI 005: Advanced English as a Foreign Language.

2002	Erica Cochran TuTh 9:30am - 10:45am	Seats (Total: 18) ONLINE

2003	Kelsey Kerr TuTh 12:30pm - 1:45pm	Seats (Total: 18) ONLINE	
2004	Benjamin Baker MWF 10:00am - 10:50am	Seats (Total: 18) ONLINE	
2005	Benjamin Baker MWF 12:00pm - 12:50pm	Seats (Total: 18) ONLINE	
2006	Laura Williams TuTh 2:00pm - 3:15pm	Seats (Total: 18) ONLINE	
2008	Robert Lucci MWF 8:00am - 8:50am	Seats (Total: 18) ONLINE	

ENGL120 **Acting Human: Shakespeare and the Drama of Identity**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

Shakespeare's ideas of dramatic realism studied through close examination of literary and dramatic techniques. How Shakespeare generates the fiction of a living, thinking person in the space of five acts, and how readers participate in the making of that fiction. Some attention to Shakespeare on film and what the playwright can teach us about different media.

0101	Gerard Passannante MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Gerard Passannante MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Gerard Passannante MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0104	Gerard Passannante MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

ENGL130 **Race and the Cultural Politics of Blood: A Historical Perspective**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

Exploration of race, as term and concept, at three different historical times and from three different perspectives, through the reading of three stories: William Shakespeare's drama Othello, Aphra Behn's novella Oroonoko, and the short story Benito Cereno by Herman Melville. Exploration of the importance of context in interpretation. Study of how a concept for rationalizing human difference appears and adapts, fuses and fades away, relocates and is repurposed. How understanding of the particular situation of the concept, its context, changes our reading of the story.

0101	Kim Coles	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0102	Kim Coles	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

ENGL140 American Fictions: U.S. Literature, History, Politics, and Constitutional Law

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

Works of American literature explored in the context of major texts and developments of U.S. history, culture, politics, and constitutional law. We begin with the Declaration of Independence and the U.S. Constitution, and survey the course of American literature and history, from 1776 to the present, in relation to defining political and constitutional issues. Readings of canonical works like "Huckleberry Finn" and "The Grapes of Wrath" coupled with special attention to minority authors and issues, and horizons of constitutional contemplation opened up by minority, immigrant, and women's voices and experiences. Key historical and political issues include human rights; equal protection; religious tolerance; democratic principles; republican structures of government; independence; revolution; slavery; removal; immigration; free speech; labor rights; civil rights; feminism; environmentalism; international law and flows of people; economic globalization; technology and digital innovation; and the role that literature and the humanities play in fostering various forms of civil society, multiculturalism, and a globally accountable citizenship.

0101	Benjamin Baker	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion
0102	Benjamin Baker	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	ONLINE	
	F 11:00am - 11:50am	ONLINE	Discussion

0103	Benjamin Baker	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	ONLINE	
	F 12:00pm - 12:50pm	ONLINE	Discussion
0104	Benjamin Baker	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	ONLINE	
	F 1:00pm - 1:50pm	ONLINE	Discussion

ENGL143 **Visualizing Knowledge: From Data to Images**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, SCIS

Explores how technology and people shape our current age of information through the various forms of visually representing information. Visualizations do not show us things that are evident--visualizations make things evident. We will thus examine the history of visualization practices, the theories of image-making that guide their production, and the current state of the art. Students will engage critically with a wide range of information visualization practices to gain an understanding of the work involved in producing them and their histories. Students will also seek out contemporary visualizations, interact with the practitioners who produce them, and produce their own visualization as a response or critique.

0101	Oliver Gaycken	Seats (Total: 48)	
	MW 2:00pm - 2:50pm	ONLINE	
	F 2:00pm - 2:50pm	ONLINE	Discussion
	Restricted to students in the Carillon living-learning community.		

ENGL201 **Inventing Western Literature: Ancient and Medieval Traditions**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

Wide range of texts, genres, and themes from ancient and medieval Western traditions. Study of cultural, historical, and artistic forces shaping traditions, and the influence and relevance of those traditions to life in twenty-first century.

0101	Garth Libhart	Seats (Total: 30)	
	MWF 12:00pm - 12:50pm	ONLINE	

ENGL202 **Inventing Western Literature: Renaissance to Modern**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

Wide range of texts from the Renaissance to the 21st century. Themes and literary techniques in the evolution of Western literature. Print publication, industrialization, questioning of religious, political, intellectual, and cultural authority.

Contact department for information to register for this course.

ENGL211 **English Literature: Beginnings to 1800**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU

Surveys medieval and early modern literary works written in England. Readings may include Beowulf, Chaucer, Spenser, Mary Wroth, Milton; eighteenth-century satire, drama, novels.

Contact department for information to register for this course.

ENGL222 **American Literature: 1865 to Present**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU

Surveys American writing from the Civil War through the Cold War. Authors such as Clemens, Frost, Hurston, Bellow.

0301	Kerishma Panigrahi	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

ENGL233 **Introduction to Asian American Literature**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL, D	General Education: DSHU, DVUP

Cross-listed with AAST233. Credit only granted for: ENGL233 or AAST233.

A survey of Asian American literatures with an emphasis on recurrent themes and historical context.

0101	Andy Yeh	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

ENGL234 **African-American Literature and Culture**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL, D	General Education: DSHU, DVUP

Cross-listed with: AASP298L. Credit only granted for: ENGL234 or AASP298L.

An exploration of the stories black authors tell about themselves, their communities, and the nation as informed by time and place, gender, sexuality, and class. African American perspective themes such as art, childhood, sexuality, marriage, alienation and mortality, as well as representations of slavery, Reconstruction, racial violence and the Nadir, legalized racism and segregation, black patriotism and black ex-patriots, the optimism of integration, and the prospects of a post-racial America.

Cross-listed with AASP298L. Credit will be granted for one of the following: AASP298L or ENGL234.

0201	Elizabeth Catchmark MWF 12:00pm - 12:50pm	Seats (Total: 30) ONLINE

ENGL235 **U.S. Latinx Literature and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail | CORE: HL, D | General Education: DSHU, DVUP

Cross-listed with: AMST298Q. Credit only granted for: ENGL235 or AMST298Q.

Examines the poetry, prose, and theater of Latinx communities in the United States from their origins in the Spanish colonization of North America to their ongoing development in the 21st century. Considers how authors use literary form to gain insight into human experience, including mortality, religious belief, gender and sexuality, war and peace, family, language use, scientific inquiry, cultural tradition, ecology, and labor. Also studies how Latinx literary traditions have shaped and been shaped by broader currents in American literature, as well as what connections exist between Latinx literature and social and artistic developments in other parts of the world, particularly Latin America and the Caribbean. Authors may include Alvar Nunez Cabeza de Vaca, Eulalia Perez, Juan Nepomuceno Seguin, Maria Amparo Ruiz de Burton, Jose Marti, Arthur A. Schomburg, Jesus Colon, Julia de Burgos, Cesar Chavez, Ariel Dorfman, Gloria Anzaldua, Junot Diaz, and Cristina Garcia.

Additional Note: Cross-listed with AMST298Q. Credit granted for ENGL235 orAMST298Q.

0101	Kristofer Reed MW 5:00pm - 6:15pm	Seats (Total: 30) ONLINE

ENGL240 **Introduction to Fiction, Poetry, and Drama**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL

Readings in the novel, short story, poetry and drama.

Contact department for information to register for this course.

ENGL243 **What is Poetry?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

An exploration of arguably the most complex, profound, and ubiquitous expression of human experience. Study through close reading of significant forms and conventions of Western poetic tradition. Poetry's roots in oral and folk traditions and connections to popular song forms.

0201	Hannah Beilenson TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE	

ENGL245 Film Form and Culture

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU

Cross-listed with: CINE245. Credit only granted for: ENGL245, CINE245 or FILM245. Formerly: FILM245.

Introduction to film as art form and how films create meaning. Basic film terminology; fundamental principles of film form, film narrative, and film history. Examination of film technique and style over past one hundred years. Social and economic functions of film within broader institutional, economic, and cultural contexts.

0101	Mauro Resmini MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Mauro Resmini MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Mauro Resmini MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0104	Mauro Resmini MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
FCB1	Kyle Bickoff M 6:00pm - 7:15pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 26) ONLINE ONLINE	

ENGL250 Reading Women Writing

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL, D	General Education: DSHU, DVUP

Cross-listed with: WGSS255. Credit only granted for: ENGL250, WMST255 or WGSS255. Formerly: WMST255.

Explores literary and cultural expressions by women and their receptions within a range of historical periods and genres. Topics such as what does a woman need in order to write, what role does gender play in the production, consumption, and interpretation of texts, and to what extent do women comprise a distinct literary subculture. Interpretation of texts will be guided by feminist and gender theory, ways of reading that have emerged as important to literary studies over the last four decades.

0101	Fatima Taha	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

ENGL255 Literature of Science and Technology

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU

Examines science and technology through the lens of British and American literature, primarily between 1800 and the present. Readings from early natural and experimental philosophers of the Scientific Revolution and Enlightenment. How literary works represent the ethics of science and technology; beneficial developments of science, and also heavy toll of industrialization. Writers studied may include Francis Bacon, Mary Shelley, Charles Darwin, H.G. Wells, Albert Einstein, Aldous Huxley, Richard Feynman, Philip K. Dick, Octavia Butler, Michael Frayn, and Tom Stoppard.

0101	Melanie Rio	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

ENGL256 Fantasy Literature

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHU

How fantasy employs alternate forms of representation, such as the fantastical, estranging, or impossible, which other genres would not allow. Through novels, short stories, graphic novels, and film, traces fantasy's roots in mythology and folklore, then explores how modern texts build upon or challenge these origins. Examination of literary strategies texts use to represent the world through speculative modes. How to distinguish fantasy from, and relate it to, other genres such as science fiction, horror, fairly tales, and magical realism. Fantasy's investment in world-building, history, tradition, and categories of identity such as race, class, and gender. How fantasy, as a genre, form, and world-view, is well-suited to our contemporary reality.

0101	Konstantinos Pozoukidis	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	ONLINE

ENGL257 **Children's Literature**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Literature of the nineteenth through the twenty-first century concerned with, and written for, children and young adults. How such narratives speak to themes of changing social, religious, political, and personal identity. Through poetry, novels, graphic novels, and film, explores how children's tales encapsulate and reflect on human existence, while pushing boundaries of what constitutes "children's literature" and what exactly defines the "child." Considers questions of literary classification through investigation of political and religious issues, gender politics, animal rights, social justice, race, war, and what it means to "grow up."

0101	Valentina Rosales	Seats (Total: 30)
	MW 3:30pm - 4:45pm	ONLINE

ENGL262 **Introduction to the Hebrew Bible/Old Testament**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

Cross-listed with: JWST262, HEBR298B. Credit only granted for: JWST262, HEBR293B, or ENGL262.

Origins of the Hebrew Bible (Old Testament), with attention to literary formations, archaeology, and social-political settings. Explorations of major questions, including who wrote the Bible, and when; relationships of the biblical tradition to the mythology and religious structures of ancient Israel's near eastern neighbors; and dynamics of politics, religious leadership, and law.

0101	Matthew Suriano	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

ENGL265 **LGBTQ+ Literatures and Media**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Restriction: Must not have completed LGBT265. Cross-listed with: LGBT265. Credit only granted for: ENGL265 or LGBT265.

A study of literary and cultural expressions of queer and trans identities, positionalities, and analytics through an exploration of literature, art, and media. We will examine historical and political power relations by considering the intersections of sexuality and gender with race, class, nation, and disability. Topics include the social construction and regulation of sexuality and gender, performance and performativity, intersectionality, and the relationship between aesthetic forms and queer/ trans subjectivity. Our interpretations will be informed by queer and trans theories.

0101	Kerishma Panigrahi TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE
0201	Justin Thompson TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE

ENGL269A **Special Topics in Study Abroad II; German Romanticism in its European Context**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL269B **Special Topics in Study Abroad II; Writing Workshop I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL269C **Special Topics in Study Abroad II; Writing Workshop II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL269R **Special Topics in Study Abroad II; Writing Rome**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL271 **Writing Poems and Stories: An Introductory Workshop**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSSP

Introduction to theory and practice of writing fiction and poetry. Emphasis on critical reading of literary models. Exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Maiasia Grimes TuTh 11:00am - 12:15pm	Seats (Total: 15) ONLINE
0102	Maiasia Grimes TuTh 11:00am - 12:15pm *Restricted to students in Jimenez-Porter Writers' House.*	Seats (Total: 5) ONLINE
0201	Claudia Rojas MW 2:00pm - 3:15pm	Seats (Total: 20) ONLINE
0301	Connor Watkins TuTh 8:00am - 9:15am	Seats (Total: 20) ONLINE
FC01	Hunter Parsons TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 15) ONLINE

ENGL272 **Writing Fiction: A Beginning Workshop**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DSSP

Introduction to theory and practice of writing fiction. Emphasis on critical reading of literary models. Exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Caroline Rothrock TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE
0201	Lisa Latouche MW 2:00pm - 3:15pm	Seats (Total: 20) ONLINE
0301	Kiera Wolfe TuTh 8:00am - 9:15am	Seats (Total: 20) ONLINE
0401	Chika Onyenezi TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE

ENGL273 **Writing Poetry: A Beginning Workshop**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DSSP

Introduction to theory and practice of writing poetry. Emphasis on critical reading of literary models. Exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Glorious Piner MWF 11:00am - 11:50am	Seats (Total: 20) ONLINE
0201	Kathryn Karoly TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE

ENGL275 **Scriptwriting for Theater, Film, and Television**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DSHU, DSSP

Cross-listed with: ARHU275. Credit only granted for: ENGL275 or ARHU275.

Introduction to the theory and practice of scriptwriting with an opportunity to read, view, evaluate, write, and revise texts meant to be performed. Students will practice writing for the stage, film, and television and also examine selected scripts, performances, and film and television clips as models for their own creative work. Students will complete frequent writing exercises, participate in workshops, and learn to apply scholarship to the analysis and critique of scripts.

Cross-listed with ARHU275.

0101	Melanie Rio TuTh 3:30pm - 4:45pm	Seats (Total: 15) ONLINE
0102	Melanie Rio TuTh 3:30pm - 4:45pm *Restricted to students in the Jimenez-Porter Writers' House.*	Seats (Total: 5) ONLINE
0201	Paul Cote MWF 10:00am - 10:50am	Seats (Total: 20) ONLINE

ENGL278B **Special Topics in Literature; German Romanticism in its European Context**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ENGL278N **Special Topics in Literature; The Romantic Experience in Europe**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ENGL278O **Special Topics in Literature; German Romanticism in its European Context**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ENGL280 **The English Language**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU

Introduction to the structure of English and its historical development, with a focus on techniques of linguistic analysis. Major topics include the sound systems of English and its patterns of word formation and sentence structure, and the ways these have changed over time and vary around the world.

0201	Linda Coleman	Seats (Total: 30)
	MWF 1:00pm - 1:50pm	ONLINE

ENGL282 **How Rhetoric Works: Persuasive Power and Strategies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU

Examines how persuasion functions and influences our lives and perception, focusing on a variety of contexts: business, politics, media, law, and entertainment. Students learn persuasive and argumentative principles to understand what rhetoric is, how it works, and what it does, and to apply the knowledge to produce effective communication appropriate for their purpose, audience, and context. A wide range of persuasive media, genres, and forms will be studied to help students sharpen how they interpret and practice persuasion.

0101	Roberto Leon	Seats (Total: 30)
	MWF 1:00pm - 1:50pm	ONLINE

ENGL289C **Introduction to Humanities, Health, and Medicine**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSHU

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department. Cross-listed with: ENGL254, HIST219N. Credit only granted for: ARHU230 , ENGL289C, ENGL254 or HIST219N.

An overview of the historical, cultural, ethical, and spiritual dimensions of medicine, human health, disease, and death from the points of view of various humanistic disciplines.

Credit only granted for: ENGL289C or ARHU230.

0101	Marybeth Shea	Seats (Total: 22)
	MWF 12:00pm - 12:50pm	ONLINE

ENGL290 **Introduction to Digital Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DSSP

Introductory course in digital studies. Surveys contemporary humanities work in digital technologies, including the web and social media and their historical antecedents. Explores design and making as analytical tools alongside reading and writing. Situates digital media within power and politics and develops critical awareness of how media shape society and ethics. Interdisciplinary approaches to creativity, analysis, and technology. While the course will include hands-on practice, no prior experience of programming, designing, or making required other than a willingness to experiment and play.

0101	Andy Yeh	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	ONLINE

ENGL291 **Writing, Revising, Persuading**

Credits: 3 | Grading Method: Regular | General Education: DSHU, DSSP

Prerequisite: Must have satisfied Fundamental Studies Academic Writing requirement.

Intermediate-level, writing-intensive course for students who have successfully satisfied the Fundamental Studies Academic Writing requirement but wish to hone skills in analyzing and producing rhetorically attuned, well-styled prose. Deeper study of rhetorical theory and its application to a wide variety of arguments and situations. Additional writing practice, techniques of revision, study of effect of stylistic choices. Topics may include argumentation theory, visual rhetoric, stylistic theory, and writing theory.

0101	Joseph Good	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ENGL293 **Writing in the Wireless World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU, DSSP

Recommended: ENGL101.

A hands-on exploration of writing at the intersection of technology and rhetoric. Students will learn to read, analyze, and compose the kinds of multimodal documents--documents combining text, image, and sound--that constitute communication in our digital world.

0101	Brittany Starr MW 2:00pm - 3:15pm	Seats (Total: 22) ONLINE
FC01	Emilee Durand MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE

ENGL296 **Reading and Writing Disability**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSHU, DVUP

Locates and analyzes disability in various settings, modes, and texts. Investigates the material and cultural effects of the language, stories, and myths of disability. Explores the many definitions and frameworks of disability: as dynamic lived experiences, as a political identity, as a rich culture, as socially constructed barriers, and as an oppressed minority group. Examines how disability is portrayed, controlled, stereotyped, and celebrated across social, medical, political, cultural, and personal networks.

0101	Konstantinos Pozoukidis MWF 11:00am - 11:50am	Seats (Total: 20) ONLINE

ENGL297 **Introduction to Professional Writing**

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: ENGL101.

Introduction to the rhetorical principles and professional practices of professional writing, particularly the research, writing, communication, analytical, and technological skills needed for the Professional Writing minor. How culture and technology relate to the work of professional writing; design principles and rhetorical moves; digital tools, research skills, and writing strategies of professional writers. Develops skills needed to publish a writing portfolio that showcases students' professional writing competencies and projects your professional writer identities.

0101	Joseph Good MW 2:00pm - 3:15pm	Seats (Total: 22) ONLINE
0201	Alexandra Calloway TuTh 2:00pm - 3:15pm	Seats (Total: 22) ONLINE

ENGL301 **This is English: Fields and Methods**

Credits: 3 Grading Method: Regular

Restriction: Must be in English Language and Literature program; or must be in Secondary Educ: English Language Arts program.

"English" means a lot of things. Are you looking for literature, or linguistics? For writing--creative, critical, or professional? For theater, or debate? For film, or even videogames? This gateway course for the English major introduces you to all of these areas and more, as well as to our discipline's unique resources for studying and enjoying them. The English discipline includes three main interpretive fields: Literary and Cultural Studies; Language, Writing, and Rhetoric; and Media Studies. This course brings together the fundamental concepts and methods for reading, viewing, and researching practiced in these fields, launching you into English studies and and helping you to choose the major track that is right for you.

0101	David Simon TuTh 11:00am - 12:15pm	Seats (Total: 18) ONLINE
0401	Sharada Balachandran Orihuela Class time/details on ELMs	Seats (Total: 18) ONLINE
0501	Sharada Balachandran Orihuela Class time/details on ELMs	Seats (Total: 18) ONLINE
0701	Scott Trudell MW 2:00pm - 3:15pm	Seats (Total: 18) ONLINE

ENGL302 **Medieval Literature in Translation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Surveys major works of English and continental Middle Ages. Readings may include romance, lyric and drama, Germanic epic, works of Dante, Chretien de Troyes, Jean de Meun, Christine de Pisan, Malory, English and continental mystics.

Contact department for information to register for this course.

ENGL305 **Early Drama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Explore medieval and Renaissance drama and performance, placing the Shakespearean stage in its cultural and historical contexts.

Contact department for information to register for this course.

ENGL310 **Medieval and Renaissance British Literature**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Detailed study of selected major medieval and Renaissance works written in England. Cultural attitudes and historical contexts. May include Beowulf, Anglo-Saxon lyric, drama, sonnets; works of women writers, Chaucer, Spenser, Sidney. Some readings in Middle English.

0101	Thomas Moser	Seats (Total: 27)
	TuTh 9:30am - 10:45am	ONLINE

ENGL312 **Romantic to Modern British Literature**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Detailed study of selected major texts from the 19th and 20th centuries. Transitions from Romanticism to Victorian age to Modernism. Historical, social, literary contexts. Issues such as rise of democracy; industrial revolution; the "woman question"; revolutions in literary form. Authors might include Wordsworth, Austen, Dickens, Arnold, T.S. Eliot, and Woolf.

0101	Brian Richardson	Seats (Total: 27)
	MWF 12:00pm - 12:50pm	ONLINE

ENGL313 **American Literature**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A detailed study of selected major texts of American literature from the 17th century to the 20th century. Issues such as race, gender, and regionalism. Authors such as Franklin, Hawthorne, Dickinson, Hemingway, and Morrison.

0201	Robert Levine	Seats (Total: 27)
	MW 3:30pm - 4:45pm	ONLINE

ENGL317 **African American Literature**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit , D

Consideration of key texts in African American literature that explore the experiences of people of African descent in America from the mid-nineteenth century to the contemporary moment. Relationship between literary texts, historical events and cultural formations. Examines a range of texts and genres (autobiography, slave narrative, travel narrative, poetry, essays, fiction), and their contribution to national literary tradition.

Also offered as AMST328U and AASP328U. Credit only granted for AMST328U ENGL317, or AASP398C.

0101	Julius Fleming	Seats (Total: 27)
	MW 2:00pm - 3:15pm	ONLINE

ENGL329C **Special Topics in Film Studies; Sexuality in the Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

Cross-listed with CMLT398L. Credit will be granted for only one of the following: CMLT398L, CMLT498L, or ENGL329C.

0101	Eugene Robinson	Seats (Total: 27)
	Class time/details on ELMs	ONLINE

ENGL329L **Special Topics in Film Studies; The Disney Studio and the Animation Industry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

Cross-listed with FILM319K. Credit granted for ENGL329L or FILM319K. Prerequisite: ENGL245, FILM245, SLLC283, or FILM283: or permission of instructor.

0101	Paul Cote	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

ENGL329P **Special Topics in Film Studies; Films of Martin Scorsese**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

Also offered as FILM359P. Credit granted for ENGL329P or FILM359P. Prerequisite: ENGL245, FILM245, FILM283, or SLLC283; or permission of department.

0101	Marianne Conroy	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

ENGL329V **Special Topics in Film Studies; Presentations of London in Modern European Literature Film and Fine Art**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

Contact department for information to register for this course.

ENGL344 **Nineteenth-Century Fiction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Major British, American, and other fiction writers of the nineteenth century studied in the context of the broad global, intellectual, and artistic interests of the century.

Contact department for information to register for this course.

ENGL346 **Twentieth Century Fiction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Major British, American, and other fiction writers of the twentieth century studied in the context of the broad global, intellectual, and artistic interests of the century.

0101	Brian Richardson TuTh 3:30pm - 4:45pm	Seats (Total: 27) ONLINE

ENGL352 **Intermediate Fiction Workshop**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of A- in ENGL271 or ENGL272; or permission of ARHU-English department.

A class in the making of fiction. Intensive discussion of students' own fiction. Readings include both fiction and essays about fiction by practicing writers. Writing short critical papers, responding to works of fiction, and the fiction of colleagues, in-class writing exercises, intensive reading, and thinking about literature, in equal parts, and attendance at readings.

0101	Maud Casey M 3:30pm - 6:00pm	Seats (Total: 15) ONLINE
0301	Rion Scott W 3:30pm - 6:00pm	Seats (Total: 15) ONLINE

ENGL353 **Intermediate Poetry Workshop**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of A- in ENGL271 or ENGL273; or permission of ARHU-English department.

A class in the making of poetry. Intensive discussion of students' own poems. Readings in both poetry and essays about poetry by practicing poets. Writing short critical prose pieces, responding critically to colleagues' poems, in-class and outside writing exercises, memorization, and attendance at poetry readings.

0101	Lindsay Bernal	Seats (Total: 15)
	Tu 3:30pm - 6:00pm	ONLINE

ENGL358D **Special Topics in U.S. Latinx Literature; Cuban Poetry & Fiction Post-1980**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topical study of selected works by U.S. Latinx writers.

Contact department for information to register for this course.

ENGL360 **African, Indian and Caribbean Writers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Selected writers from countries formerly colonies of Britain, France, Denmark, etc. Attention to ways regions have developed distinctive political and aesthetic values resulting from indigenous traditions and foreign influences.

0201	Sangeeta Ray	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

ENGL368B **Special Topics in African American, African, and African Diaspora Literatures; Blues and African American Folksong**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Topical study of selected literature by African American and Black Diaspora writers from Africa, the Caribbean, North and South America, and beyond.

0201	Malki Manukulasuriya, Barry Pearson TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE

ENGL368D **Special Topics in African American, African, and African Diaspora Literatures; African American Folklore and Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Topical study of selected literature by African American and Black Diaspora writers from Africa, the Caribbean, North and South America, and beyond.

0201	Barry Pearson, Malki Manukulasuriya TuTh 3:30pm - 4:45pm	Seats (Total: 25) ONLINE

ENGL368J **Special Topics in African American, African, and African Diaspora Literatures; Contemporary Black Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Topical study of selected literature by African American and Black Diaspora writers from Africa, the Caribbean, North and South America, and beyond.

0201	Sangeeta Ray TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE

ENGL369A **Special Topics in Study Abroad III; The Scene of Reading**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369B **Special Topics in Study Abroad III; Representing London: The Eighteenth Century I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369C **Special Topics in Study Abroad III; The Dickens City I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369E **Special Topics in Study Abroad III; The Crisis of Culture: Literature and Politics 1918-1948**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369F **Special Topics in Study Abroad III; British Drama from the 1950s to the Present**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369G **Special Topics in Study Abroad III; Adapting Literature to Screen**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369H **Special Topics in Study Abroad III; London Stage**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369K **Special Topics in Study Abroad III; Great Directors**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369L **Special Topics in Study Abroad III; Angloamerican Travelers in Spain**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369Q **Special Topics in Study Abroad III; Literature of the Shoah**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369Z **Special Topics in Study Abroad III; The London Stage**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL373 **Senior Honors Project**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENGL370. Restriction: Must be in English Language and Literature program.

Research and writing of senior honors project. Strongly recommended for students planning graduate work.

0101	Jason Rudy	Seats (Total: 20)
	M 3:30pm - 5:30pm	ONLINE

ENGL376 **The Speculative Imagination: Science Fiction on Page and Screen**

Credits: 3

Grading Method: Regular, Pass-Fail

Credit only granted for: ENGL379Y or ENGL376. Formerly: ENGL379Y.

Examines a global cross-section of science fiction in literature, film, television, comics, and other media. Studies the unique formal qualities of science fiction and traces its history from its origin in the eighteenth century to the present. Explores how the twenty-first century has brought new prominence to science fiction by creators of color, women creators, and queer creators, as well as intersections of these. Considers how science fiction addresses a range of phenomena--from environmental destruction to surveillance to imperialism and militarism. Students learn how to analyze and write about the formal and historical dimensions of the genre.

0101	Lee Konstantinou	Seats (Total: 27)
	TuTh 11:00am - 12:15pm	ONLINE

ENGL378L **Special Topics in English; Narrating the City**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Offers sustained attention to notable current themes and approaches in English studies. Topics vary by section and semester.

0101	Emily Mitchell	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ONLINE

ENGL378M **Special Topics in English; Digital Publishing with Minimal Computing: Humanities at a Global Scale**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Offers sustained attention to notable current themes and approaches in English studies. Topics vary by section and semester.

Cross-listed with CMLT398M, MITH301, and LASC348C. Credit granted for MITH301, CMLT398M, ENGL378M, or LASC348C.

0101	Raffaele Viglianti	Seats (Total: 15)
	W 12:00pm - 1:50pm	ONLINE
	F 12:00pm - 12:50pm	ONLINE

ENGL378Z **Special Topics in English; Women and Memory in Material and Digital Worlds**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Offers sustained attention to notable current themes and approaches in English studies. Topics vary by section and semester.

Repeatable to 9 credits if contents differs. Jointly offered with WMST49 8V. Credit only granted for ENGL378Z or WMST498V.

0101	Jessica Enoch	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

ENGL379V **Special Topics in Literature; Gypsy Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with CMLT398N. Credit will be granted for only one of the following: CMLT398N, CMLT498N, or ENGL379V.

0101	Eugene Robinson	Seats (Total: 27)
	Class time/details on ELMs	ONLINE

ENGL381 **MGA Legislative Seminar**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail General Education: FSPW

Prerequisite: Students who have taken courses with comparable content may contact the department; or ENGL101. Restriction: Permission of ARHU-English department. Additional information: Application required. Contact english@umd.edu for more information.

Prepares students to intern for the Maryland General Assembly. Introduces standard legislative genres and assigns extended practice in researching legislative issues.

Cross-listed with HONR368A. Credit only granted for one of the following : ENGL381 or HONR368A. Admission to this course is by application only. Click here for more details.

0101	Thomas Lowderbaugh	Seats (Total: 15)
	Tu 3:30pm - 6:00pm	ONLINE

ENGL385 **English Semantics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of meaning in language and language use. Examines how the senses of words and other linguistic constructions are mentally represented, and how they contribute to the construction of meanings in linguistic communication.

0201	Michael Israel	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	ONLINE

ENGL388A **Writing, Research, and Media Internships; Second Life Workshop in African American Literature**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail

Field work in English studies.

Contact department for information to register for this course.

ENGL388D **Writing, Research, and Media Internships; Dickinson Electronic Archives**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail

Field work in English studies.

Prerequisite: permission of department. Repeatable to 12 credits.

0101	Martha Nell Smith	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

ENGL388P **English Careers Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular General Education: DSSP

Prerequisite: Permission of ARHU-English department. Repeatable to 12 credits if content differs. Additional information: Each enrolled credit equals 45 hours of on-site internship work.

Students receive credit for an internship of their choice that focuses at least half of its work on core English skills such as writing, editing, and research. Students secure their own internship placements. Course assignments include, for instance, an activity log, reflection papers, a supervisor evaluation, and a final portfolio of work.

Prerequisite: permission of department. Repeatable to 12 credits. Contact english@umd.edu.

0101	Karen Lewis	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

ENGL388T **Writing, Research, and Media Internships; Maryland Institute for Technology in the Humanities Internships**

(Perm req)

Credits: 1-3 Grading Method: Regular

Field work in English studies.

Prerequisite: permission of department. Repeatable to 12 credits.

0101	Purdom Lindblad Contact instructor or department for details.	Seats (Total: 5)

ENGL388V **Undergraduate Teaching Assistants in English**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail General Education: DSSP

Prerequisite: Permission of the ARHU-English department. Repeatable to 12 credits. Additional information: Students should consult with the UTA Coordinator to determine the number of enrollment credits.

A weekly teaching practicum and concurrent internship as an undergraduate teaching assistant in an English course. Students will explore the theories and best practices of teaching and learning in the various fields of the English discipline, particularly writing and literary studies. The emphasis is on creating inclusive classrooms and working with diverse learners and is grounded in theories of critical pedagogy. Students will apply principles of learning theory to develop and facilitate learner-centered lessons and discussions. They will also study composition pedagogy in preparation for responding to student writing in the course for which they are an assistant.

Prerequisite: permission of department. Repeatable to 12 credits. Contact Lyra Hilliard, lyrahill@umd.edu. Students taking ENGL388V for the first time should register for section 0101 or 0401 for 4 credits. When taking the course again in subsequent semesters, students should register for 2001 or 3001 for 3 credits.

0101	Mark Forrester W 3:30pm - 5:00pm	Seats (Total: 20) ONLINE
0401	Lyra Hilliard Tu 3:30pm - 5:00pm	Seats (Total: 20) ONLINE
2001	Mark Forrester Contact instructor or department for details.	Seats (Total: 10)
3001	Lyra Hilliard Contact instructor or department for details.	Seats (Total: 10)

ENGL388W **Writing Center Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular General Education: DSSP

Prerequisite: Permission of the Writing Center (1205 Tawes Hall). Repeatable to 12 credits.

Examines face-to-face and online writing center theory and practice through readings, exercises, and supervised tutoring. Students investigate the writing process and help other writers to negotiate it.

Prerequisite: permission of department. Repeatable to 12 credits. To apply, go to http://www.english.umd.edu/academics/writingcenter/internship Students taking ENGL388W for the first time should register for section 0101 for 4 credits. When taking the course again in subsequent semesters, students should register for 2001.

0101	Thomas Earles M 3:30pm - 6:00pm Class time/details on ELMs *Students registering for 0101 should register for four credits.*	Seats (Total: 20) ONLINE ONLINE
2001	Thomas Earles Class time/details on ELMs	Seats (Total: 4) ONLINE

ENGL390 **Science Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits; and junior standing or higher. Credit only granted for: ENGL390 or ENGL393S. Formerly: ENGL393S.

Specifically designed for students interested in further study in the physical and biological sciences. Exposes students to the conventions of scientific prose in the genres of research articles and proposals. Students also learn to accommodate scientific information to general audiences.

Click here for more course information.

0301	Katherine Oneill MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0401	Katherine Oneill MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0501	Katherine Oneill MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
1501	Robin Allen-Klein TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
1505	Robin Allen-Klein TuTh 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
1601	Richard Reynnells Tu 6:30pm - 9:10pm	Seats (Total: 19) ONLINE

1801	Richard Reynnells W 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
9001	Kate Wilson Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Kate Wilson Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL390H **Science Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits; and junior standing or higher. Credit only granted for: ENGL390 or ENGL393S. Formerly: ENGL393S.

Specifically designed for students interested in further study in the physical and biological sciences. Exposes students to the conventions of scientific prose in the genres of research articles and proposals. Students also learn to accommodate scientific information to general audiences.

Restricted to students in the Honors College or departmental Honors programs.

0101	Marybeth Shea MWF 9:00am - 9:50am *Restricted to University Honors.*	Seats (Total: 19) ONLINE
0201	Marybeth Shea MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0301	Robert Lucci MWF 11:00am - 11:50am *Restricted to University Honors.*	Seats (Total: 19) ONLINE

ENGL391 **Advanced Composition**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

An advanced composition course which emphasizes constructing written arguments accommodated to real audiences.

Click here for more course information.

0401	Kate Wilson MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0402	Aysha Jawed MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0501	Kate Wilson MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
0601	Sabrina Islam MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
0701	Sabrina Islam MW 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
1101	Thomas Earles TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1201	Peter Grybauskas TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1301	Peter Grybauskas TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1701	Mark Fitzgerald Tu 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1901	Peter Witte Th 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
6101	Shannon Zellars Strohl MF 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
6102	Catherine Bayly MF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE

6103	Tom Hatcher Tu 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
6104	Peter Witte Th 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9001	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9003	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9004	Daune O'Brien Class time/details on ELMs	Seats (Total: 19) ONLINE
9005	Mark Fitzgerald Class time/details on ELMs	Seats (Total: 19) ONLINE
9006	Daune O'Brien Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL391H **Advanced Composition**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

An advanced composition course which emphasizes constructing written arguments accommodated to real audiences.

Restricted to students in the Honors College or departmental Honors programs.

Click here for more course information.

0201	Mark Forrester MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE

ENGL392 **Legal Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Conventions of legal writing and research. Students learn how to read and write about cases, statutes, or other legislation; how to apply legal principles to fact scenarios; and how to present a written analysis for readers in the legal profession. Assignments may include the law-school application essay, case briefs, legal memos, and client letters.

Click here for more course information.

1101	John Kim TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1301	John Kim TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1401	John Kim TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
1601	Michael Winett M 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1701	Michael Winett Tu 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1801	Michael Winett W 6:30pm - 9:10pm	Seats (Total: 19) ONLINE

ENGL393 **Technical Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Focuses on the writing of technical papers and reports.

Click here for more course information.

0001	Patrick Nelson MWF 8:00am - 8:50am	Seats (Total: 19) ONLINE

0102	Elliot Berger MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0201	Sheila Lalwani MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0202	Aysha Jawed MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0301	Patrick Nelson MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0303	Joan Mooney MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0401	Joan Mooney MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0403	Alexandra Calloway MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0701	Kelly Hebron MW 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
0801	Daune O'Brien MW 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
1001	Elizabeth McClure TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
1101	Elizabeth McClure TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1201	Danuta Hinc TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1202	Elizabeth McClure TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1402	Nia Crawford TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE

1505	Mark Fitzgerald TuTh 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
1602	Kelly Cresap M 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1603	Sheila Lalwani M 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1702	Sarah Dammeyer Tu 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1801	Kelly Cresap W 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1803	Daune O'Brien W 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1901	Sheila Lalwani Th 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1902	Mark Fitzgerald Th 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
6103	Alysia Sawchyn Th 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
6104	Nia Crawford Th 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE
9001	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE
9003	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE

9004	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE
9005	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9006	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9007	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9008	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9009	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9010	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9011	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9012	Andrew Delfino Class time/details on ELMs	Seats (Total: 19) ONLINE
9013	Sajeela Yaqub Class time/details on ELMs	Seats (Total: 19) ONLINE
9014	Dennis Winston Class time/details on ELMs	Seats (Total: 19) ONLINE
9015	Dennis Winston Class time/details on ELMs	Seats (Total: 19) ONLINE
9016	Phillip Moses Class time/details on ELMs	Seats (Total: 19) ONLINE
9017	Phillip Moses Class time/details on ELMs	Seats (Total: 19) ONLINE

9018	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9019	Sarah Dammeyer Class time/details on ELMs	Seats (Total: 19) ONLINE
9020	Joshua Buursma Class time/details on ELMs	Seats (Total: 19) ONLINE
9021	Sajeela Yaqub Class time/details on ELMs	Seats (Total: 19) ONLINE
9022	Andrew Delfino Class time/details on ELMs	Seats (Total: 19) ONLINE
9023	Andrew Delfino Class time/details on ELMs	Seats (Total: 19) ONLINE
9024	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9025	Dennis Winston Class time/details on ELMs	Seats (Total: 19) ONLINE
9026	Dennis Winston Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL393H **Technical Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Focuses on the writing of technical papers and reports.

Restricted to students in the Honors College or departmental Honors programs.

Click here for more course information.

6101	Christopher Crane Tu 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 19) ONLINE ONLINE

6102	Christopher Crane	Seats (Total: 19)
	Tu 8:00am - 9:15am	ONLINE
	Class time/details on ELMs	ONLINE

ENGL393Q **Technical Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Focuses on the writing of technical papers and reports.

3001	Alexandra Calloway	Seats (Total: 19)
	F 9:00am - 11:40am	ONLINE
	The writing of technical papers and reports with additional service learning hours required to be completed as part of the course.	

ENGL393X **Technical Writing**

(Perm req)

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Focuses on the writing of technical papers and reports.

Limited to students for whom English is a second language and who have a score below any of the following: SAT Verbal 400, TOEFL 575, CELT 250. Students who have received an "A" in ENGL 101 or its equivalent cannot register for ENGL 393X.

Click here for more course information.

1501	Laura Williams	Seats (Total: 15)
	TuTh 3:30pm - 4:45pm	ONLINE

ENGL394 **Business Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Intensive practice in the forms of written communication common in the business world: letters, memos, short reports, and proposals. Focus on the principles of rhetoric and effective style.

Click here for more course information.

0101	Robert Lucci MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0201	Robert Oliver MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0301	Robert Oliver MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0401	Robert Oliver MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0402	Robert Lucci MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0404	Elliot Berger MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0501	Elliot Berger MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
0601	Anna Szczepaniec-Bialas MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
0701	Anna Szczepaniec-Bialas MW 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
0801	Anna Szczepaniec-Bialas MW 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
1101	Blake Wilder TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1201	Adam Lloyd TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1301	Adam Lloyd TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE

1303	Thomas Lowderbaugh TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1501	Tom Hatcher TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
1505	Erica Cochran TuTh 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
1508	Robert Crane TuTh 6:30pm - 7:45pm	Seats (Total: 19) ONLINE
1701	Jonathan Rick Tu 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1902	Erica Cochran Th 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
3001	Blake Wilder F 9:00am - 11:40am	Seats (Total: 19) ONLINE
9004	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9005	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9006	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9007	Radford Skudrna Class time/details on ELMs	Seats (Total: 19) ONLINE
9008	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9009	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9010	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE

9011	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9012	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9013	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9014	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9015	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9016	Radford Skudrna Class time/details on ELMs	Seats (Total: 19) ONLINE
ESG1	Joseph Wappel MW 11:00am - 12:15pm *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 19) ONLINE
ESG2	Joseph Wappel MW 9:30am - 10:45am *Restricted to COMM majors at Shady Grove.*	Seats (Total: 19) ONLINE
ESG3	Sheila Lalwani TuTh 8:00am - 9:15am *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 19) ONLINE
SG91	Holly Smith TuTh 11:00am - 12:15pm *Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 19) ONLINE

SG92	Holly Smith TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
	Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	
SG93	Holly Smith TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
	Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

ENGL395 **Writing for Health Professions**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Focus on accommodating health-related technical material and empirical studies to lay audiences, and helping writers to achieve stylistic flexibility and correctness.

Click here for more course information.

0101	James Goodwin MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0201	James Goodwin MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0301	Zachary Frank MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
0401	James Goodwin MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0501	Michael Schmidt MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
0601	Michael Schmidt MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE

0801	Zachary Frank MW 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
0901	Zachary Frank MW 6:30pm - 7:45pm	Seats (Total: 19) ONLINE
1001	Joseph Angelella TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
1101	Michelle Moncrieffe TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1201	Michelle Moncrieffe TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1301	Joseph Angelella TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1402	Kisa Lape TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
1501	Kisa Lape TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
1502	Joseph Angelella TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
1506	Joseph Angelella TuTh 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
1507	Michael Schmidt TuTh 6:30pm - 7:45pm	Seats (Total: 19) ONLINE
1701	Michelle Moncrieffe Tu 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
9001	Kisa Lape Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Kisa Lape Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL398A **Writing for the Arts**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Examines the situations and genres in which working professionals (practitioners, advocates, administrators, and educators) write about art, culture, and artists. The course covers the complex process that writers need to learn, including how to accommodate information to specific audiences, how to use stylistic and visual devices to make information more accessible, and how to edit their own work as well as that of their peers. Assignments parallel the writing demands that students will face in the workplace, including analyzing and composing artist statements, an arts manifesto, art education guides, press releases about artists and their work, critical reviews of exhibits and performances, and proposals to funding agencies and foundations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. Not open to students who have completed ENGL391A. Credit will be granted for only one of the following: ENGL398A or ENGL391A. Formerly ENGL391A. An advanced composition course which emphasizes writing about the arts.

Click here for more course information.

1001	Caroline Wilkins TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
1101	Caroline Wilkins TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1601	Elizabeth Benton M 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1701	Peter Witte Tu 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1801	Kevin Tervala W 6:30pm - 9:10pm	Seats (Total: 19) ONLINE

ENGL398B **Writing for Social Entrepreneurship**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Designed for students who want to develop the skills needed to start a successful social venture--a start-up business with a social mission or a new nonprofit program. The course centers on a major writing project such as a business plan, a website design plan, a fundraising proposal, or a concept paper for a new nonprofit organization. Students produce other communication projects that social entrepreneurs use to develop their businesses and nonprofits, such as presentations or pitches to prospective investors/donors, marketing materials, and a job announcement. Students will learn from local social entrepreneurs who share their experiences of using writing to succeed in the field.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

0601	Eric Thiel MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
0701	Eric Thiel MW 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
0801	Eric Thiel MW 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
1601	Mrim Boutla M 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1701	Mrim Boutla Tu 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1901	Roxanne Clements Th 6:30pm - 9:10pm	Seats (Total: 19) ONLINE

ENGL398C **Writing Case Studies and Investigative Reports**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Designed for students interested in becoming police investigators, educators, case workers, insurance adjusters, nurses, or program evaluators, or in entering branches of the social sciences that investigate cases and value reports based on accurate descriptions and compelling narratives. Such reports must be factual and yet useful to decision makers, unbiased and yet focused. Students study genres and language skills from careful summarizing to convincing storytelling.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. An advanced composition course which emphasizes writing cases and investigative reports.

Click here for more course information.

0701	Joshua Buursma MW 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
0801	Joshua Buursma MW 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
1507	Joshua Buursma MW 6:30pm - 7:45pm	Seats (Total: 19) ONLINE
ESG1	Joseph Wappel TuTh 9:30am - 10:45am *Registration is restricted to CCJS-Shady Grove students.*	Seats (Total: 19) ONLINE
ESG2	Joseph Wappel TuTh 12:30pm - 1:45pm *Registration is restricted to CCJS-Shady Grove students.*	Seats (Total: 19) ONLINE

ENGL398E **Writing About Economics**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Examines the characteristic genres of writing in modern economics, including theoretical and empirically based journal articles, reports for government and commercial clients, and economic information presented to a variety of non-professional audiences, such as citizen-oriented and public policy organizations. Students learn how to analyze these documents rhetorically and how to communicate economic information using the content, arrangement, style, and visual graphics best suited to the purposes and standards of particular audiences. Core assignments include a genre-based journal and document analysis, presentations on economics-related topics for both economists and non-professional audiences, and a major research-based writing project for an audience outside of the classroom.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. Not open to students who have completed ENGL394E. Credit will be granted for only one of the following : ENGL398E or ENGL394E. Formerly ENGL394E. A business writing class focusing on writing about economics.

Click here for more course information.

0801	Michael Winett	Seats (Total: 19)
	MW 5:00pm - 6:15pm	ONLINE

ENGL398L **Scholarly Writing in the Humanities**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Examines scholarship in the humanities as a genre of professional writing and investigates the norms and procedures of advanced academic writing. Assignments parallel the writing demands that students will face in the academic workplace, including a graduate school application essay, a genre review, an annotated bibliography, a journal article, and an oral presentation of article subject matter.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. An advanced composition class focusing on the norms and procedures of advanced academic writing.

Click here for more course information.

0301	Mark Forrester	Seats (Total: 19)
	MWF 11:00am - 11:50am	ONLINE

ENGL398N **Writing for Non-Profit Organizations**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Examines professional writing and communication work in the non-profit sector. Students will analyze the audiences and document genres that they may encounter in real-world non-profit work and will learn how to compose many of these documents, from press releases and other public relations material to position papers, reports, and grant proposals. Students may also have the opportunity to add a service-learning component to the course by working with and for an area non-profit.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. Not open to students who have completed ENGL394N. Credit will be granted for only one of the following ENGL398N or ENGL394N. Formerly ENGL394N. A busniness writing class focusinog on writing about nonprofits.

Click here for more course information.

0301	Ruth Phillips	Seats (Total: 19)
	MWF 11:00am - 11:50am	ONLINE

0401	Ruth Phillips MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
0601	Kevin Tervala MW 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
0801	Michael Schmidt MW 5:00pm - 6:15pm	Seats (Total: 19) ONLINE
1001	David Todd TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
1101	David Todd TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1201	David Todd TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1301	Rebecca Holden TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1401	Rebecca Holden TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE

ENGL398R **Writing Non-Fictional Narratives**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Approaches nonfiction narrative-a kind of writing influenced by fiction, magazine journalism, memoir, and personal essay--as a form of professional writing used in publishing and a range of careers involving proposal writing, work documentation, lobbying, social marketing, and political commentary, among others. Students learn to use many of the same tools as fiction writers, such as dialogue, vivid description, developing characters, nonlinear structure, and shifts in tense, time, and points of view. They also learn how to edit their own work as well as that of their peers, doing multiple revisions of the major assignments for a final portfolio. Major assignments include essays targeted to specific publications, query letters, audience analysis, and a publisher analysis.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

1001	Lyra Hilliard TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
1101	Pamela Gerhardt TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1102	Danuta Hinc TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
1201	Pamela Gerhardt TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
1301	Pamela Gerhardt TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1401	Danuta Hinc TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
1501	Danuta Hinc TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE

ENGL398V **Writing About the Environment**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: Must have fulfilled the Academic Writing (FSAW) requirement. Restriction: Must have earned a minimum of 60 credits.

Designed for those aspiring to work in a variety of fields that influence and are influenced by environmental science, including public policy, advocacy, science, and industry. Students learn to apply principles of technical writing to a range of scenarios and issues particular to the intersection of scientific knowledge and environmental policy. Writing audiences range from the public to decision-makers. The course emphasizes writing both within and across disciplines to enlist research for practical contexts.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. Not open to students who have completed ENGL393E. Credit will be granted for only one of the following ENGL398V or ENGL393E. Formerly ENGL393E.

Click here for more course information.

1201	Jesse Brooks TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE

1301	Jesse Brooks TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
1501	Jesse Brooks TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
1502	Shannon Zellars Strohl TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
1701	Shannon Zellars Strohl Tu 6:30pm - 9:10pm	Seats (Total: 19) ONLINE
1702	Shannon Zellars Strohl Th 6:30pm - 9:10pm	Seats (Total: 19) ONLINE

ENGL402 **Chaucer**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Works read in Middle English. Readings may include Canterbury Tales, Troilus and Criseyde, dream visions, lyrics.

Contact department for information to register for this course.

ENGL409A **Study Abroad Special Topics IV; Solitude in Life and Letters in Enlightenment Britain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409B **Study Abroad Special Topics IV; Shakespeare: The Play and the Book**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409C **Study Abroad Special Topics IV; Shakespeare's Italian Plays**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409D **Study Abroad Special Topics IV; Time, Narrative and Culture (Sem A)**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409E **Study Abroad Special Topics IV; The Revolution Controversy: Politics and Genre**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409F **Study Abroad Special Topics IV; Grand Tours: Nineteenth Century Adventure Stories for Young Readers and their Twentieth Century Afterlives**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409G **Study Abroad Special Topics IV; Thomas Hardy and the Victorian Modern**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409H **Study Abroad Special Topics IV; The Caribbean Novel**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409I **Study Abroad Special Topics IV; The New York Century: Urban Literary Culture 1900-1999**

Credits: 3-6

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409L **Study Abroad Special Topics IV; Literature of London**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409P **Study Abroad Special Topics IV; Phonies, Fakes, Liars and Conmen: Readings in Fact and Fiction**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL410 **Edmund Spenser**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Selected works of Edmund Spenser in their literary, social, and historical contexts. Special attention to The Faerie Queene; also sonnets and lyric poetry.

0101	Kim Coles	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ENGL414 **Milton**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Poetry and major prose in their social, political, and literary-historical contexts. Special attention to Paradise Lost. Other works may include Samson Agonistes and shorter poems.

Contact department for information to register for this course.

ENGL420 **English Romantic Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

British poetry, drama, fiction, and criticism c.1790 to c.1830, a period of dramatic social change and revolution in literature, philosophy, the arts, industry, and politics. Authors include Austen, Wordsworth, Coleridge, Keats, Byron, Percy, and Mary Shelley.

Contact department for information to register for this course.

ENGL422A **English Victorian Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

A survey of English literature of the Victorian period. Writers may include Arnold, Browning, Tennyson, Dickens, George Eliot, Carlyle, Ruskin, Newman, and Wilde.

Contact department for information to register for this course.

ENGL428M **Seminar in Language and Literature; Booklab: How to do things with Books**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics will vary each semester. The course will provide a seminar experience in material or methodologies not otherwise available to the major.

Restriction: Junior Standing. For ENGL majors only. Course intended primarily for students in English Honors Program. English majors with strong academic records may also apply. Permission from the Director of Honors required. Credit only granted for ENGL 479P or ENGL 428M.

0101	Matthew Kirschenbaum	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	ONLINE

ENGL429 **Independent Research in English**

(Perm req)

Credits: 1-6 Grading Method: Regular

An advanced independent research project for qualified students, supervised by an English faculty member, on a topic not ordinarily covered in available courses.

Prerequisite: ENGL301 and two English courses, excluding Fundamental Studies requirement.

Contact department for information to register for this course.

ENGL437 **Contemporary American Literature**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Prose, poetry, drama of living American writers. Current cultural and social issues.

0101	Lee Konstantinou	Seats (Total: 15)
	TuTh 9:30am - 10:45am	ONLINE

ENGL439A **Spotlight on Major Writers; Toni Morrison: Race, Gender, & American Culture**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An intensive study of a single writer, or a handful of writers, to understand the shifts in the writer's craft and cultural influence, both past and present.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Repeatable up to 9 credits.

0101	GerShun Avilez	Seats (Total: 22)
	TuTh 12:30pm - 1:45pm	ONLINE

ENGL439D **Spotlight on Major Writers; Dickinson, Erotics, Poetics, Biopics: Some (Queer) Ways We Read Poetry**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An intensive study of a single writer, or a handful of writers, to understand the shifts in the writer's craft and cultural influence, both past and present.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Cross-listed with LGBT448Y and WMST498Y. Credit only granted for ENGL439D, LGBT448Y, or WMST498Y.

0101	Martha Nell Smith	Seats (Total: 22)
	TuTh 2:00pm - 3:15pm	ONLINE

ENGL439K **Spotlight on Major Writers; Two Madmen: William Cowper (d.1800) & John Ruskin (d. 1900)**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An intensive study of a single writer, or a handful of writers, to understand the shifts in the writer's craft and cultural influence, both past and present.

Prerequisite: two English courses in literature or permission of department. Repeatable to 9 credits if content differs.

0101	Michael Olmert	Seats (Total: 22)
	MW 3:30pm - 4:45pm	ONLINE

ENGL439M **Spotlight on Major Writers; Major American Writers After 1865**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a single writer, or a handful of writers, to understand the shifts in the writer's craft and cultural influence, both past and present.

Contact department for information to register for this course.

ENGL444 **Feminist Critical Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: WMST200, WGSS200, WMST250, WGSS250, or ENGL250. Cross-listed with: WGSS444. Credit only granted for: ENGL444, WMST444 or WGSS444. Formerly: WMST444.

Issues in contemporary feminist thought that have particular relevance to textual studies, such as theories of language, literature, culture, interpretation, and identity.

Contact department for information to register for this course.

ENGL454 **Modern Drama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

The history of modern British drama, from its roots in Chekhov and Ibsen, through the modernisms of Samuel Beckett and Bertolt Brecht, through the Angry Young Men of the 1950s, and right up to the present. Most plays will be from the last 40 years, by writers such as David Hare, Tom Stoppard, Lucy Kirkwood, Caryl Churchill, Roy Williams, Lucy Prebble, Alan Bennett, Brian Friel, Terrence Rattigan, Kwame Kwei-Armah, Sarah Kane, and Alice Birch. We will also look at how class, money, immigration, and the end of the Empire changed British plays over time. And we will consider modern theater architecture and production design as well as the directing instincts of, for instance, Peter Brook, Katie Mitchell, Marianne Elliott, and Nicholas Hytner.

0101	Michael Olmert	Seats (Total: 22)
	MW 2:00pm - 3:15pm	ONLINE

ENGL457 **The Modern Novel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Modernism in the novel of the twentieth century. Such writers as Joyce, Lawrence, Murdoch, James, Forster, Faulkner, Hemingway, Fitzgerald, Ellison, Welty, Nabokov and Malamud.

Contact department for information to register for this course.

ENGL458A **Literature by Women after 1800; Gender, Race and Empire in Women's Writing 1780-1900**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected writings by women after 1800.

Contact department for information to register for this course.

ENGL460 **Archival Research Methods in English Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses beyond the Fundamental Studies courses; or permission of ARHU-English Department.

Introduces approaches for doing archival research in English studies, exploring how researchers develop their scope and practices of study and how they access and use archival materials electronically and on site to further their research questions. Investigates a historical period, genre, or theme through the lens of manuscripts, ephemera, and other artifacts. Case studies vary by semester.

Restriction: Two English courses beyond the Fundamental Studies courses; or permission of ARHU-English Department

0101	Karen Nelson	Seats (Total: 22)
	TuTh 5:00pm - 6:15pm	ONLINE

ENGL465 **Theories of Sexuality and Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two lower-level English courses, at least one in literature; or permission of ARHU-English department. Cross-listed with LGBT465. Credit only granted for: ENGL465 or LGBT465.

An in-depth study of the ways in which sexuality and sexual difference create or confound the conditions of meaning in the production of literary texts. Attention to psychoanalysis, history of sexuality, feminist theory, and other accounts of sexual identity.

Contact department for information to register for this course.

ENGL466 **Arthurian Legend**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Development of Arthurian legend in English and continental literature from Middle Ages to twentieth century. All readings in modern English.

0101	Thomas Moser TuTh 11:00am - 12:15pm	Seats (Total: 22) ONLINE

ENGL468A **Selected Topics in Film Studies; The Scene of Writing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced studies in various periods and genres of film.

Contact department for information to register for this course.

ENGL469E **The Craft of Literature: Creative Form and Theory; Prose Poem**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examines various forms of poetry and/or fiction, emphasizing the practice of making literary art and the aesthetic and theoretical approaches that define it. Students will practice the elements of literary craft, producing and experimenting with a wide range of forms and conventions in poetry and/or fiction. They will also produce critical work that articulates and contextualizes theoretical approaches to the making of literary art.

Prerequisite: Two English courses in literature or creative writing; and have completed a 200-level creative writing workshop in ENGL or permission of ARHU-English Department. Repeatable to 9 credits if content differs.

0101	Joshua Weiner MW 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

ENGL470 **African-American Literature: From Slavery to Freedom**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Examines African-American literature from its beginnings to the early twentieth century, including genres ranging from slave narratives, pamphlets, essays, and oratory, to poetry and fiction. Our emphasis is on the interaction between literature and literary forms, on the one hand, and historical and political developments in the push toward emancipation, on the other.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Cross-listed with AASP478B. Credit granted for ENGL470 or AASP478B.

0201	Chad Infante	Seats (Total: 22)
	TuTh 2:00pm - 3:15pm	ONLINE

ENGL475 **Postmodern Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

The origins and ongoing development of postmodern literature. Aspects of the "postmodern condition," such as the collapse of identity, the erasure of cultural and aesthetic boundaries, and the dissolution of life into textuality. The novel and other genres and media.

Contact department for information to register for this course.

ENGL478A **Selected Topics in English and American Literature before 1800; Comedy and Cruelty**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of key topics in literary works from earlier historical periods.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	David Simon	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	ONLINE

ENGL479B **Selected Topics in English and American Literature after 1800; Black Performance: From Slavery to Hip Hop**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced study of key topics in literary works from later historical periods.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Julius Fleming	Seats (Total: 22)
	MW 3:30pm - 4:45pm	ONLINE

ENGL479J **Selected Topics in English and American Literature after 1800; Flash Fictions**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced study of key topics in literary works from later historical periods.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Rion Scott	Seats (Total: 20)
	MW 2:00pm - 3:15pm	ONLINE

ENGL479Y **Selected Topics in English and American Literature after 1800; Seminar in Poetry Translation**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced study of key topics in literary works from later historical periods.

Prerequisite: Two English courses in literature or permission of ARHU-English department. Repeatable to 9 credits if content differs. Cross-listed with CMLT679T. Credit granted for ENGL479Y or CMLT679T.

0101	Michael Collier	Seats (Total: 22)
	Tu 3:30pm - 6:00pm	ONLINE

ENGL487 **Principles and Practices of Rhetoric**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A seminar examining foundational concepts and approaches in the theory and practice of rhetoric in civic, professional, academic, and interpersonal settings; focusing on key issues in persuasion, argumentation, and eloquence in historical and contemporary contexts.

0101	Sara Wilder	Seats (Total: 22)
	MW 2:00pm - 3:15pm	ONLINE

ENGL489N **Special Topics in Language and Rhetoric; Invention of "Proper English": from the English Enlightenment to the American Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in language and rhetoric, such as discourse analysis, semantics, or cognitive linguistics; comparative rhetoric and rhetorical theory, digital rhetorics, women's and minority rhetorics, or the history of rhetoric.

0201	Michael Israel	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	ONLINE

ENGL492 **Graphic Design and Rhetoric**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Students must have satisfied Fundamental Studies Academic Writing requirement.

An exploration of the visual dimensions of texts and the skills involved in designing them well. Considers graphic design theory and history from a rhetorical perspective, working to understand and practice the use of symbol systems to express, inform, and advocate. Includes direct experimentation with the principles and techniques of graphic design.

Students are encouraged to bring laptops to class meetings.

0101	Melanie Kill	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

ENGL493 **Writing Genres as Social Action**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: Satisfactory completion of the professional writing requirement (FSPW). Restriction: Must have earned a minimum of 60 credits.

A rhetorical genre studies approach to understanding the work that texts do in the world. Examines issues of identity, power, and medium as they relate to writing in various contexts. Students analyze the texts, context(s), and social significance of a public, professional, digital, and/or advanced academic genre and produce writing that meets, modifies, and subverts expectations.

Students are encouraged to bring laptops to class meetings.

0201	Melanie Kill	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

ENGL494 **Editing and Document Design**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENGL393 or ENGL391; or students who have taken courses with comparable content may contact the department.

Principles of general editing for clarity, precision and correctness. Applications of the conventions of grammar, spelling, punctuation and usage, and organization for logic and accuracy. Working knowledge of the professional vocabulary of editing applied throughout the course.

Must have completed Fundamental Studies Professional Writing requirement.

0201	Cecilia Shelton	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

ENGL495 **Independent Study in Honors**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENGL373 and ENGL370. Restriction: Must be in English Language and Literature program; and candidacy for honors in English.

Completion and presentation of the senior honors project.

Contact department for information to register for this course.

ENGL497 **English at Work**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: ENGL301; and an ENGL course at the 300-level or higher. Restriction: Must have earned a minimum of 60 credits.

Examines how English majors put their academic knowledge and skills to work in professional workplaces after graduation. Students learn strategies to research careers, and they shadow a person in a career of interest for a day. Students learn to compose different professional genres to write and speak about and for professional development and advancement, including inquiry letters, technical descriptions, professional portfolios, and elevator pitches. Students will critically examine the learning they have done in their undergraduate coursework and compose a vision for bringing that learning to life in their future work.

0101	Blake Wilder TuTh 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

ENGL498 **Advanced Fiction Workshop**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

An advanced class in the making of fiction. Intensive discussion of students' own fiction. Readings include both fiction and essays about fiction by practicing writers. Writing short critical papers, responding to works of fiction, and to colleagues' fiction, in-class writing exercises, intensive reading, and thinking about literature, in equal parts, and attendance at readings.

Prerequisite: ENGL352 or ENGL396; or permission of department.

0101	Maud Casey W 3:30pm - 6:00pm	Seats (Total: 15) ONLINE
0201	Gabrielle Fuentes Th 3:30pm - 6:00pm	Seats (Total: 15) ONLINE
0301	Emily Mitchell Tu 3:30pm - 6:00pm	Seats (Total: 15) ONLINE

ENGL499 **Advanced Poetry Workshop**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

An advanced class in the making of poetry. Intensive discussion of students' own poems. Readings include both poetry and essays about poetry by practicing poets. Writing short critical prose pieces, responding critically to colleagues' poems, in-class and outside writing exercises, and attendance at poetry readings.

Prerequisite: ENGL397 or ENGL353; or permission of department.

0101	Elizabeth Arnold Th 3:30pm - 6:00pm	Seats (Total: 15) ONLINE

ENGL601 **Literary Research and Critical Contexts**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

For Majors Only

0101	Tita Chico	Seats (Total: 14)
	Tu 3:30pm - 6:00pm	ONLINE

ENGL611 **Approaches to College Composition**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ARHU-English department. Additional information: Required for graduate assistants (optional to other graduate students).

A seminar emphasizing rhetorical and linguistic foundations for the handling of a course in freshman composition.

0101	Scott Wible	Seats (Total: 14)
	Th 12:00pm - 2:30pm	ONLINE

ENGL619A **Readings in Linguistics; Discourse Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

A survey of theoretical and applied linguistics.

0101	Linda Coleman	Seats (Total: 14)
	M 3:30pm - 6:00pm	ONLINE

ENGL628G **Readings in African American Literature; Comparative Black and Native American Literature**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of English Department. Repeatable to 9 credits if content differs.

0101	Chad Infante	Seats (Total: 14)
	Tu 6:30pm - 9:00pm	ONLINE

ENGL679 **Professional and Career Mentoring for Master's Students**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Augments advising currently provided by the English Department Graduate Studies Office. Individual professional and career mentoring for MA and MFA students from a faculty member.

Contact department for information to register for this course.

ENGL688 **Poetry Workshop**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Poetry workshop.

0201	Elizabeth Arnold W 3:30pm - 6:00pm	Seats (Total: 12) ONLINE

ENGL689 **Fiction Workshop**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Fiction workshop.

0101	Gabrielle Fuentes W 3:30pm - 6:00pm	Seats (Total: 12) ONLINE

ENGL699 **Independent Study**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Contact department for information to register for this course.

ENGL702 **Cultures of Theory**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Must have completed an introductory course in critical theory. Cross-listed with CMLT702. Credit only granted for: CMLT702 or ENGL702.

An exploration of the socio-historic, material, and cultural contexts of various theoretical practices and traditions.

Shared with CMLT679E. Credit granted for ENGL702 or CMLT679E.

0101	Kari Kraus W 3:30pm - 6:00pm	Seats (Total: 9) ONLINE

ENGL719J **Seminar in Renaissance Literature; The Experimental Self**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

0101	Gerard Passannante W 6:30pm - 9:00pm	Seats (Total: 11) ONLINE

ENGL729C **Seminar in Eighteenth-Century Literature; Empire and Emotion in the Long Eighteenth Century**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Laura Rosenthal Th 6:30pm - 9:00pm	Seats (Total: 11) ONLINE

ENGL738B **Seminar in Nineteenth-Century Literature; Gothic Spaces: Gender, History, and Romanticism**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Orrin Wang M 3:30pm - 6:00pm	Seats (Total: 11) ONLINE

ENGL798B **Critical Theory Colloquium**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

An intensive advanced exploration of current problems and issues in critical theory.

0101	Orrin Wang Class time/details on ELMs	Seats (Total: 20) ONLINE

ENGL798D **Critical Theory Colloquium; Digital Studies**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

An intensive advanced exploration of current problems and issues in critical theory.

Class meets in TWS 3136 on the following dates: 9/8, 10/6, 11/3, 12/8.

0101	Matthew Kirschenbaum F 3:00pm - 5:00pm	Seats (Total: 20) ONLINE

ENGL799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENGL809 **Academic Publishing Workshop**

(Perm req)

Credits: 1-2 Grading Method: Sat-Fail

A workshop for the preparation of articles of other critical writing for publication in academic journals or other professional venues.

0101	GerShun Avilez	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

ENGL878 **Pedagogical Mentoring for Doctoral Students**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Pedagogical mentoring by roster faculty members for graduate students teaching 200-level literature courses.

Contact department for information to register for this course.

ENGL879 **Professional Mentoring for Doctoral Students**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Augments advising currently provided by the English Department Graduate Studies Office. Individual professional and career mentoring for PhD students from a faculty member.

Contact department for information to register for this course.

ENGL888A **Practicum in English Studies; Graduate Research**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

0101	GerShun Avilez	Seats (Total: 10)
	M 8:00am - 8:50am	TWS 1320

ENGL898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Pedagogical mentoring by roster faculty members for graduate students teaching 200-level literature courses.

Contact department for information to register for this course.

ENGL899 **Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENMA Engineering, Materials Fall 2020

ENMA150 **Materials of Civilization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

The discovery of new materials has shaped history and built civilizations. The utilization, properties and production techniques of materials from the Bronze Age up through modern times and into the future will be traced. These materials are explained by considering their atomic structure, the binding forces between atoms and their arrangement, and how controlling the structure controls the materials properties.

0101	Timothy Foecke TuTh 3:30pm - 4:45pm W 2:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0102	Timothy Foecke TuTh 3:30pm - 4:45pm Th 11:00am - 11:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion

ENMA180 **Materials Science and Engineering: The Field and the Future**

Credits: 1 Grading Method: Regular

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

Overview of the profession and the components of the Materials Science and Engineering program. Students will become familiar with the departmental faculty, areas of specialization within MSE, professional society student chapter, research opportunities and other resources available to students.

0101	N Parker W 3:00pm - 3:50pm	Seats (Total: 30) ONLINE

ENMA300 **Introduction to Materials Engineering**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES100; and permission of ENGR-Materials Science & Engineering department. Corequisite: MATH241. Recommended: PHYS261 and PHYS260. Restriction: Permission of ENGR-Mechanical Engineering department. Cross-listed with ENME382. Credit only granted for: ENMA300 or ENME382.

Structure of materials, chemical composition, phase transformations, corrosion and mechanical properties of metals, ceramics, polymers and related materials. Materials selection in engineering applications.

0101	Liyang Dai-Hattrick TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE	
0201	Liyang Dai-Hattrick TuTh 9:30am - 10:45am *For students majoring in Materials Science and Engineering.*	Seats (Total: 89) ONLINE	
0301	Elisabeth Smela MWF 10:00am - 10:50am	Seats (Total: 30) ONLINE	

ENMA312 **Experimental Methods in Materials Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300. Corequisite: ENMA460. Restriction: Junior standing or higher.

Introduction to experimental methods in materials characterization; synthesis of colloidal nanoparticles; X-ray diffraction and light scattering; optical microscopy; thermal conductivity and expansion; electrical measurements; heat capacity; computational materials design.

0101	Audaldo Ponce Tu 2:00pm - 3:15pm M 9:00am - 11:50am	Seats (Total: 10) ONLINE KEB 1135	 Lab
0102	Audaldo Ponce Tu 2:00pm - 3:15pm W 9:00am - 11:50am	Seats (Total: 10) ONLINE KEB 1135	 Lab

ENMA362 **Mechanical Properties**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300. Restriction: Junior standing or higher; and permission of ENGR-Materials Science & Engineering department.

Overview of Mechanical Behavior, Elastic Behavior, Dislocations, Plastic Deformation, Strengthening of Crystalline Materials, Composite Materials, High Temperature Deformation of Crystalline Materials, Permanent Deformation of Noncrystalline Materials, Tensile Fracture at Low Temperatures, Engineering Aspects of Fracture, High Temperature Fracture, Fatigue, and Experimental determination of Mechanical Properties including Hardness of Metals and Strength of Metals, Polymers, Ceramics and Composites.

For ENMA majors only.

0101	Timothy Foecke MWF 12:00pm - 12:50pm Tu 9:00am - 11:00am	Seats (Total: 22) ONLINE ONLINE	 Lab
0102	Timothy Foecke MWF 12:00pm - 12:50pm Th 9:00am - 11:00am	Seats (Total: 22) ONLINE ONLINE	 Lab

ENMA400 **Introduction to Atomistic Modeling in Materials**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300, MATH206, and ENMA460. Recommended: Basic knowledge in quantum mechanics (preferred but not required); basic knowledge in statistical mechanics (preferred but not required). Also offered as: ENMA600. Credit only granted for: ENMA489A, ENMA400, ENMA698A, or ENMA600. Formerly: ENMA489A.

This is an introductory course designed to study atomistic modeling and simulation techniques used in materials research. This course covers the theories, methods, and applications of atomistic-scale modeling techniques in simulating, understanding, and predicting the properties of materials. Specific topics include: molecular statics using empirical force fields; quantum mechanical methods including density functional theory; molecular dynamics simulations; and Monte Carlo and kinetic Monte Carlo modeling.

0101	Yifei Mo TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE	

ENMA422 **Radiation Effects of Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300; and permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA422 or ENMA489E. Formerly: ENMA489E.

Ionizing radiation, radiation dosimetry and sensors, radiation processing, radiation effects on: polymers, metals, semiconductors, liquids, and gases. Radiation in advanced manufacturing, radiation-physical technology.

0101	Mohamad Al-Sheikhly TuTh 3:30pm - 4:45pm	Seats (Total: 30) ONLINE

ENMA441 **Characterization of Materials**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300 and MATH206. Restriction: Permission of ENGR-Materials Science & Engineering department; and senior standing. Credit only granted for: ENMA489T or ENMA441. Formerly: ENMA489T.

Techniques to characterize the properties of materials whose characteristic dimensions range from nanometers to macroscopic. These include conventional crystalline and noncrystalline materials, with a special attention to materials of current technological interest. The course will include recent results from the scientific literature.

0101	John Cumings TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE

ENMA460 **Introduction to Solid State Physics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS271, PHYS270, and MATH241. Restriction: Junior standing or higher; and must be in Engineering: Materials Science program. Cross-listed with: PHYS431. Credit only granted for: ENMA460 or PHYS431.

Classes of materials; introduction to basic ideal and real materials' behavior including mechanical, electrical, thermal, magnetic and optical responses of materials; importance of microstructure in behavior. One application of each property will be discussed in detail.

0101	Ichiro Takeuchi MW 5:00pm - 6:15pm Contact instructor or department for details.	Seats (Total: 50) ONLINE

ENMA464 **Environmental Effects on Engineering Materials**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300. Or permission of ENGR-Materials Science & Engineering department; and permission of instructor.

Introduction to the phenomena associated with the resistance of materials to damage under severe environmental conditions. Oxidation, corrosion, stress corrosion, corrosion fatigue and radiation damage are examined from the point of view of mechanism and influence on the properties of materials. Methods of corrosion protection and criteria for selection of materials for use in radiation environments.

0101	Sreeramamurthy Ankem MWF 2:00pm - 2:50pm	Seats (Total: 25) ONLINE	

ENMA466 **Advanced Materials Fabrication Laboratory**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA465; and permission of ENGR-Materials Science & Engineering department.

This course allows students an opportunity to study advanced materials systems in depth through a combination of lectures and hands-on laboratory experiments. Students will be trained in materials processing and characterization techniques. Each student will fabricate materials and devices in our state-of-the-art nanofabrication clean room facility (Fablab), as well as evaluate them using a variety of characterization techniques.

Lab and team project times to be arranged with students.

0101	Gary Rubloff W 10:00am - 11:30am Class time/details on ELMs	Seats (Total: 4) ONLINE ONLINE	 Lab
0102	Gary Rubloff W 10:00am - 11:30am Class time/details on ELMs	Seats (Total: 4) ONLINE ONLINE	 Lab
0103	Gary Rubloff W 10:00am - 11:30am Class time/details on ELMs	Seats (Total: 4) ONLINE ONLINE	 Lab

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ENMA471 **Kinetics, Diffusion and Phase Transformations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in ENMA461. Restriction: Junior standing or higher; or permission of ENGR-Materials Science & Engineering department.

Fundamentals of diffusion, the kinetics of reactions including nucleation and growth and phase transformations in materials.

0101	Raymond Phaneuf	Seats (Total: 49)
	TuTh 11:00am - 12:15pm	IRB 0324

ENMA486 **Seminar in Materials Science and Engineering**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Engineering: Materials Science program.

Current research in materials science and engineering and related fields. The lectures are presented by scientists and engineers from academia, national laboratory, US government, etc., in the format of seminars.

0101	Timothy Koeth, Ji-Cheng Zhao	Seats (Total: 4)
	F 1:00pm - 2:30pm	ONLINE

ENMA487 **Capstone Preparation**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Must be in Engineering: Materials Science program; and senior standing; and permission of ENGR-Materials Science & Engineering department.

In preparation for the senior level design course, students will do background research and develop white papers from which teams will form around short listed design projects. The projects should focus on a society, industry, military or technological based problem in Materials Science and Engineering leading to a design and strategy to address the problem in the following course, ENMA 490. The course will include written and oral presentations of the white papers and team proposals.

0101	Raymond Phaneuf	Seats (Total: 40)
	W 1:00pm - 1:50pm	IRB 1116

ENMA489L **Selected Topics in Engineering Materials; Machine Learning for Materials Science**

Credits: 3 Grading Method: Regular, Audit

Selected topics of current importance in materials science and engineering.

The goal of the course is to familiarize the students with basic as well as state of the art knowledge of machine learning and its applications to materials science and engineering. We will cover the range of machine learning topics with applications including feature identification and extraction, determining predictive descriptors, uncertainty analysis, and identifying the most informative experiment to perform next. One focus of the class is to build the skills necessary for developing an autonomous materials research system, where machine learning controls experiment design, execution, and analysis in a closed-loop.

0101	Aaron Kusne, Ichiro Takeuchi	Seats (Total: 10)
	W 1:00pm - 3:40pm	ONLINE
	Contact instructor or department for details.	

ENMA495 **Polymeric Engineering Materials I**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENMA300. Restriction: Permission of ENGR-Materials Science & Engineering department.

Study of polymeric engineering materials and the relationship to structural type. Elasticity, viscoelasticity, anelasticity and plasticity of single and multiphase materials. Emphasis is on polymetric materials.

0101	Luz Martinez-Miranda	Seats (Total: 25)
	MW 3:30pm - 4:45pm	ONLINE

ENMA499 **Senior Laboratory Project**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Students work with a faculty member on an individual laboratory project in one or more of the areas of engineering materials. Students will design and carry out experiments, interpret data and prepare a comprehensive laboratory report.

0101	Timothy Koeth	Seats (Total: 6)
	Class time/details on ELMs	ONLINE

ENMA600 **Advanced Atomistic Modeling in Materials**

Credits: 3 Grading Method: Regular

Prerequisite: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA600, ENMA 698A, ENMA400 or ENMA489A. Formerly: ENMA698A.

This is an advanced course designed to study atomistic modeling and simulation techniques used in materials research. This course covers the theories, methods, and applications of atomistic-scale modeling techniques in simulating, understanding, and predicting the properties of materials. Specific topics include: molecular statics using empirical force fields; quantum mechanical methods including density functional theory; molecular dynamics simulations; and Monte Carlo and kinetic Monte Carlo modeling.

0101	Yifei Mo	Seats (Total: 5)
	TuTh 9:30am - 10:45am	ONLINE

ENMA613 **Materials Science of Quantum Computing**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Materials Science & Engineering department. Recommended: Strongly recommended coursework in introduction to materials science, electronic materials, solid state physics, quantum mechanics and basic knowledge in computer programming or MATLAB.

Quantum computing is the emerging field that attempts to perform information processing on a quantum mechanical state (qubit). This graduate level course targets advanced undergraduate and beginning graduate students for an introduction to this field of applied physics and the related material structures needed for elementary quantum computing. This course focuses on targeted topics of quantum mechanics and solid state physics as applicable to ion trap qubits, electron spin qubits, and superconducting qubits with connections to actual material structures their design and means of fabrication.

0101	Christopher Richardson	Seats (Total: 20)
	TuTh 5:00pm - 6:30pm	ONLINE

ENMA641 **Nanotechnology Characterization**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA698T or ENMA641. Formerly: ENMA698T.

Techniques to characterize the properties of materials whose characteristic dimensions are a few to a few hundred nanometers, including conventional nanocrystalline materials, but concentrating on novel nanomaterials: carbon nanotubes, quantum dots, quantum wires, and quantum wells are covered. The emphasis is on recent results from the scientific literature concerning those properties that make nanostructures interesting: quantum effects, novel transport phenomena, enhanced mechanical properties associated with localization and with small crystallite size.

0101	John Cumings	Seats (Total: 3)
	TuTh 12:30pm - 1:45pm	ONLINE

ENMA650 **Nanometer Structure of Materials**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENMA460; or students who have taken courses with comparable content may contact the department. And permission of ENGR-Materials Science & Engineering department.

The basic concepts required for understanding nanostructured materials and their behavior will be covered. Topics covered include the structural aspects of crystalline and amorphous solids and relationships to bonding types, point and space groups. Summary of diffraction theory and practice. The reciprocal lattice. Relationships of the microscopically measured properties to crystal symmetry. Structural aspects of defects in crystalline solids.

0101	Gottlieb Oehrlein	Seats (Total: 26)
	MW 5:00pm - 6:15pm	ONLINE

ENMA660 **Thermodynamics in Materials Science**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Corequisite: ENMA650. Restriction: Permission of ENGR-Materials Science & Engineering department.

Thermodynamics of engineering solids. Thermal, diffusional and mechanical interactions in macroscopic systems. Systems in thermal contact, systems in thermal and diffusive contact, systems in thermal and mechanical contact.

0101	Oded Rabin	Seats (Total: 25)
	MW 3:30pm - 4:45pm	ONLINE

ENMA664 **Advanced Environmental Effects on Engineering Materials**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: ENMA664 or ENMA698K. Formerly: ENMA698K.

Introduction to the phenomena associated with the resistance of materials to damage under severe environmental conditions. Oxidation, corrosion, stress corrosion, corrosion fatigue and radiation damage are examined from the point of view of mechanism and influence on the properties of materials. Methods of corrosion protection and criteria for selection of materials for use in radiation related environments.

0101	Sreeramamurthy Ankem	Seats (Total: 5)
	MWF 2:00pm - 2:50pm	ONLINE

ENMA680 **Determination of Structure, Chemical Composition and Defects in Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENMA650. Restriction: Permission of ENGR-Materials Science & Engineering department.

Basic principles of electron microscopy theory, electron diffraction, and imaging theory. The electron beam sample interaction that gives rise to different signals is related to the structural and compositional information that is obtained from a sample using a TEM. The most common TEM techniques for structural characterization of a sample, namely, electron diffraction, bright/dark field imaging, and high resolution lattice imaging are discussed. Compositional information obtained from x-ray fluorescence and electron energy loss as well as the resolution of these techniques is also covered. A description of techniques used to study magnetic materials is also presented.

0101	Lourdes Salamanca-Riba	Seats (Total: 21)
	TuTh 3:30pm - 4:45pm	ONLINE

ENMA683 **Structural Determination Laboratory**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA698L or ENMA683. Formerly: ENMA698L.

The operation of an electron microscope is covered. TEM techniques that are used to characterize the structure, defects and composition of a sample are presented and used to study a variety of materials. These techniques are: electron diffraction patterns, bright/dark field imaging, high resolution lattic imaging and energy dispersive x-ray spectroscopy. Also covers different sample preparation techniques for TEM. The goal is that the students become independent users of the TEM.

0101	Lourdes Salamanca-Riba	Seats (Total: 5)	
	Th 9:30am - 12:30pm	KEB 1237	Lab

0201	Lourdes Salamanca-Riba F 2:30pm - 5:30pm	Seats (Total: 5) KEB 1237	Lab

ENMA688 **Seminar in Materials Science and Engineering**

Credits: 1 Grading Method: Regular, Audit

Current research in materials science and engineering and related fields.

0101	Ji-Cheng Zhao, Timothy Koeth F 1:00pm - 2:30pm	Seats (Total: 24) ONLINE

ENMA689C **Special Topics in Engineering Materials; Reliability and Failure Mechanisms of Nanosystems**

Credits: 3 Grading Method: Regular, Audit

0101	Aristos Christou MW 1:00pm - 2:15pm	Seats (Total: 25) ONLINE
0201	Aristos Christou Class time/details on ELMs	Seats (Total: 10) ONLINE
RE01	Aristos Christou Class time/details on ELMs	Seats (Total: 5) ONLINE

ENMA698 **Special Problems in Materials Science and Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Individual, supervised study in materials science and engineering.

Contact department for information to register for this course.

ENMA797 **Independent Study**

Credits: 3 Grading Method: Regular, Audit

This course is designed to provide students with a directed independent study course in order to prepare the scholarly paper required for the master's degree without thesis degree option.

0101	Ichiro Takeuchi	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

ENMA799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENMA898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENMA899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENME Engineering, Mechanical Fall 2020

ENME201 **Careers in Mechanical Engineering**

Credits: 1 Grading Method: Sat-Fail

The Mechanical Engineering Curriculum, Career Paths. Research areas in the Mechanical Engineering Department. The Mechanical Engineering Profession.

0101	Gary Pertmer	Seats (Total: 65)
	Th 12:30pm - 1:30pm	ONLINE

ENME202 **Computing Fundamentals for Engineers**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: Must be concurrently enrolled in MATH141. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENAE202 or ENME202.

Introduction to computational tools for the solution of engineering problems. C++ & MATLAB programming including branching and loops, functions, file handling, arrays, and data structures. Students will be introduced to object-oriented programming, basic computing, algorithms, and principles of software engineering.

0101	Sami Ainane	Seats (Total: 42)	
	MW 11:00am - 11:50am F 8:00am - 9:50am	ONLINE ONLINE	 Lab
0102	Sami Ainane	Seats (Total: 42)	
	MW 11:00am - 11:50am Th 3:00pm - 4:50pm	ONLINE ONLINE	 Lab
0103	Sami Ainane	Seats (Total: 29)	
	MW 11:00am - 11:50am Th 3:00pm - 4:50pm	ONLINE ONLINE	 Lab
0106	Sami Ainane	Seats (Total: 42)	
	MW 11:00am - 11:50am W 3:00pm - 4:50pm	ONLINE ONLINE	 Lab
0107	Sami Ainane	Seats (Total: 29)	
	MW 11:00am - 11:50am Th 5:00pm - 6:50pm	ONLINE ONLINE	 Lab

ENME208 **Introduction to Automotive Engineering and Design**

(Perm req)

Credits: 2 Grading Method: Regular

Selected concepts in automotive engineering and design at the introductory level utilizing the Terps Racing Baja SAE student project as a learning instrument. This class compliments ENME408, Automotive Design, which focuses on the Terps Racing Formula SAE car.

0101	Scott Schmidt	Seats (Total: 10)	
	Tu 6:30pm - 7:30pm Th 6:30pm - 8:30pm	JMP 1215 JMP 1215	 Discussion

ENME272 **Introduction to Computer Aided Design**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES100; and must have completed or be concurrently enrolled in MATH141. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENME 414 or ENME272.

Fundamentals of CAD, using solid modeling packages (Pro/E, SolidWorks, and Autodesk Inventor). Two and three dimensional drawing. Dimensioning and specifications. Introduction of CAD based analysis tools. Students will complete a design project.

0101	Mohammad Fazelpour M 8:00am - 9:50am	Seats (Total: 42) ONLINE	
0201	Mohammad Fazelpour W 8:00am - 9:50am	Seats (Total: 42) ONLINE	
0301	Ryan Smith F 1:00pm - 2:50pm	Seats (Total: 42) ONLINE	
0401	Ryan Smith Th 8:00am - 9:50am	Seats (Total: 42) ONLINE	
0501	Mohammad Fazelpour Tu 8:00am - 9:50am	Seats (Total: 42) ONLINE	

ENME331 **Fluid Mechanics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES232 and ENES221. Credit only granted for: BIOE331, ENCE305, ENFP300, or ENME331.

Principles of fluid mechanics. Mass, momentum and energy conservation. Hydrostatics. Control volume analysis. Internal and external flow. Boundary layers. Modern measurement techniques. Computer analysis. Laboratory experiments.

0101	Amir Riaz, Siddhartha Das MW 12:00pm - 12:50pm Tu 1:00pm - 2:50pm	Seats (Total: 50) ONLINE ONLINE	 Lab
0102	Amir Riaz, Siddhartha Das MW 12:00pm - 12:50pm W 1:00pm - 2:50pm	Seats (Total: 50) ONLINE ONLINE	 Lab
0103	Amir Riaz, Siddhartha Das MW 12:00pm - 12:50pm Th 1:00pm - 2:50pm	Seats (Total: 50) ONLINE ONLINE	 Lab
0105	Siddhartha Das, Amir Riaz MW 12:00pm - 12:50pm Tu 3:00pm - 4:50pm	Seats (Total: 50) ONLINE ONLINE	 Lab

0106	Siddhartha Das, Amir Riaz MW 12:00pm - 12:50pm W 3:00pm - 4:50pm	Seats (Total: 50) ONLINE ONLINE	 Lab

ENME332 **Transfer Processes**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME331. Credit only granted for: ENME332 or ENFP312.

The principles of heat transfer. Conduction in solids. Convection. Radiation. Modern measurement techniques. Computer analysis.

0101	Amir Riaz, Marino diMarzo MW 9:00am - 9:50am Tu 1:00pm - 2:50pm	Seats (Total: 45) ONLINE ONLINE	 Lab
0102	Amir Riaz, Marino diMarzo MW 9:00am - 9:50am W 1:00pm - 2:50pm	Seats (Total: 45) ONLINE ONLINE	 Lab
0103	Marino diMarzo, Amir Riaz MW 9:00am - 9:50am Th 1:00pm - 2:50pm	Seats (Total: 45) ONLINE ONLINE	 Lab
0104	Marino diMarzo, Amir Riaz MW 9:00am - 9:50am F 1:00pm - 2:50pm	Seats (Total: 45) ONLINE ONLINE	 Lab

ENME350 **Electronics and Instrumentation I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: PHYS271 and PHYS270.

Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing of analog circuits. Laboratory experiments.

0101	Jungho Kim, Xinan Liu MW 8:00am - 8:50am M 1:00pm - 2:50pm	Seats (Total: 55) ONLINE ONLINE	 Lab

0102	Jungho Kim, Xinan Liu MW 8:00am - 8:50am Th 1:00pm - 2:50pm	Seats (Total: 55) ONLINE ONLINE	 Lab
0103	Xinan Liu, Jungho Kim MW 8:00am - 8:50am W 3:20pm - 5:10pm	Seats (Total: 55) ONLINE ONLINE	 Lab
0104	Jungho Kim, Xinan Liu MW 8:00am - 8:50am Tu 3:20pm - 5:10pm	Seats (Total: 55) ONLINE ONLINE	 Lab
0105	Jungho Kim, Xinan Liu MW 8:00am - 8:50am M 3:20pm - 5:10pm	Seats (Total: 55) ONLINE ONLINE	 Lab

ENME351 **Electronics and Instrumentation II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS271, ENME350, and PHYS270.

Continuation of ENME 350. Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing of analog circuits. Laboratory experiments.

0101	Steven Mitchell MW 10:00am - 10:50am Tu 1:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Lab
0102	Steven Mitchell MW 10:00am - 10:50am W 6:00pm - 7:50pm	Seats (Total: 40) ONLINE ONLINE	 Lab
0103	Steven Mitchell MW 10:00am - 10:50am W 1:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Lab
0104	Steven Mitchell MW 10:00am - 10:50am Tu 6:00pm - 7:50pm	Seats (Total: 40) ONLINE ONLINE	 Lab

ENME361 **Vibration, Controls and Optimization I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220, ENES221, and MATH246; and (MATH206 or ENME202). Restriction: Must be in Engineering: Mechanical program.

Fundamentals of vibration, controls and optimization. Analysis and design in time, Laplace and frequency domains. Mathematical description of system response, system stability, control and optimization. Optimal design of mechanical systems.

0101	Miao Yu TuTh 9:30am - 10:45am	Seats (Total: 180) ONLINE	

ENME371 **Product Engineering and Manufacturing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES221; and (ENME392 or STAT400). Restriction: Must be in Engineering: Mechanical program.

Business aspects of engineering product development. Relationship of design and manufacturing. Product specification. Statistical process control. Design team development. The development process.

0101	Vincent Nguyen MW 11:00am - 11:50am Th 5:00pm - 6:50pm	Seats (Total: 35) ONLINE ONLINE	 Lab
0102	Vincent Nguyen MW 11:00am - 11:50am Th 3:00pm - 4:50pm	Seats (Total: 35) ONLINE ONLINE	 Lab
0103	Vincent Nguyen MW 11:00am - 11:50am F 9:00am - 10:50am	Seats (Total: 35) ONLINE ONLINE	 Lab
0104	Vincent Nguyen MW 11:00am - 11:50am Th 7:00pm - 8:50pm	Seats (Total: 35) ONLINE ONLINE	 Lab
0105	Vincent Nguyen MW 11:00am - 11:50am W 6:00pm - 7:50pm	Seats (Total: 35) ONLINE ONLINE	 Lab

ENME382 **Introduction to Materials Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES100; and permission of ENGR-Mechanical Engineering department. Corequisite: MATH241. Recommended: PHYS261 and PHYS260. Restriction: Permission of ENGR-Mechanical Engineering department. Cross-listed with ENMA300. Credit only granted for: ENMA300 or ENME382.

Structure of materials, chemical composition, phase transformations, corrosion and mechanical properties of metals, ceramics, polymers and related materials. Materials selection in engineering applications.

0101	Liyang Dai-Hattrick TuTh 11:00am - 12:15pm	Seats (Total: 90) ONLINE
0301	Elisabeth Smela MWF 10:00am - 10:50am	Seats (Total: 90) ONLINE

ENME392 **Statistical Methods for Product and Processes Development**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH241.

Integrated statistical methodology for the improvement of products and processes in terms of performance, quality and cost. Designed experimentation. Statistical process control. Software application. Laboratory activities.

Delivered via ITV.

0101	David Bigio TuTh 11:00am - 12:15pm	Seats (Total: 103) ONLINE
0201	David Bigio TuTh 9:30am - 10:45am	Seats (Total: 120) ONLINE

ENME400 **Machine Design**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in ENME361. Restriction: Permission of ENGR-Mechanical Engineering department.

Design of mechanical elements and planar machines. Failure theories. Design of pressure vessels, joints, rotating elements, and transmission elements. Kinematic structures, graphical, analytical, and numerical analysis and synthesis of linkages, gear trains, and flywheels are covered.

0101	Chandrasekhar Thamire MW 9:00am - 9:50am F 10:00am - 11:50am	Seats (Total: 75) ONLINE ONLINE	 Discussion
0201	Mohammad Fazelpour TuTh 10:00am - 10:50am Th 2:00pm - 3:50pm	Seats (Total: 75) ONLINE ONLINE	 Discussion

ENME408 **Selected Topics in Engineering Design; Automotive Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Creativity and innovation in design. Generalized performance analysis, reliability and optimization as applied to the design of components and engineering systems. Use of computers in design of multivariable systems.

Restriction: Must be in Engineering: Mechanical program; and senior standing. Or permission of ENGR-Mechanical Engineering department. Repeatable to 6 credits if content differs. Creativity and innovation in design. Generalized performance analysis, reliability and optimization as applied to the design of components an engineering systems. Use of computers in design of multivariable systems.

0101	Leonard Hamilton MW 5:00pm - 6:15pm	Seats (Total: 55) ONLINE	

ENME416 **Additive Manufacturing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME331. And ENME272; or ENME414. Restriction: Permission of ENGR-Mechanical Engineering department.

Develop a comprehensive understanding of fundamental additive manufacturing, 3D printing approaches, including: extrusion-based deposition, stereolithography, powder bed-based melting, and inkjet-based deposition. Cultivate a design for-additive manufacturing skillset for CAD and CAM methodologies to produce successful 3D prints. Fabricate 3D mechanical objects using a variety of 3D printing technologies on campus. Execute a design project that demonstrates how additive manufacturing technologies can overcome critical limitations of traditional manufacturing processes.

0101	Ryan Sochol MWF 12:00pm - 12:50pm	Seats (Total: 50) ONLINE	

ENME423 **Modern Climate Control and Building Energy Design/Analysis**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES232. Corequisite: ENME332. Restriction: Permission of ENGR-Mechanical Engineering department.

Fundamentals and design calculations of heat and moisture transfer in buildings; evaluation of cooling, heating and power requirements of buildings; building energy consumption simulations, use of alternative energy and energy conservation measures in buildings; fundamentals of fans/pumps and air/water distribution in buildings; introduction to refrigeration and energy systems for data centers and other mission-critical facilities.

Delivered via ITV.

0101	Jelena Srebric	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	ONLINE

ENME426 **Production Management**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: BMGT385 or ENME426.

The basic concepts and models needed to understand and design manufacturing systems, including the history of manufacturing, performance measures, queuing systems, variability, production planning and scheduling, lean manufacturing, and pull production control.

0101	Jeffrey Herrmann	Seats (Total: 53)
	MW 2:00pm - 3:15pm	ONLINE

ENME430 **Fundamentals of Nuclear Reactor Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246. Restriction: Permission of ENGR-Mechanical Engineering department.

Fundamental aspects of nuclear physics and nuclear engineering, including nuclear interactions; various types of radiation and their effects on materials and humans; and basic reactor physics topics, including simplified theory of reactor critically.

0101	Mahmoud Massoud	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	ONLINE

ENME432 **Reactor and Radiation Measurements Laboratory**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME430 and MATH246. Restriction: Permission of ENGR-Mechanical Engineering department.

Basics concepts of nuclear radiation and radiation detectors including types of radiation, radioactive decay, and interactions of radiation with matter.

0101	Amber Johnson	Seats (Total: 10)	
	Th 9:30am - 10:20am	ONLINE	
	Th 4:00pm - 7:00pm	ONLINE	Lab

ENME440 **Applied Machine Learning for Engineering and Design**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME392; or permission of instructor. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENME440, ENME808E, or ENME743.

Learn how to apply techniques from Artificial Intelligence and Machine Learning to solve engineering problems and design new products or systems. Design and build a personal or research project that demonstrates how computational learning algorithms can solve difficult tasks in areas you are interested in. Master how to interpret and transfer state-of-the-art techniques from computer science to practical engineering situations and make smart implementation decisions.

0101	Mark Fuge	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

ENME441 **Mechatronics and the Internet of Things**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME351. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENME489B or ENME441. Formerly: ENME489B.

Mechatronics integrates dynamical systems, transducers, computation, control and design. Students will gain experience with digital circuit development, mechatronics design and participate in labs and projects culminating in the development of a mobile robotic platform. Course aims to reveal the dynamic nature of mechanical components where the domains of mechanics, electronics and software converge. Project driven, hands-on course in which student will learn about the Raspberry Pi platform, wireless communication using Pi and Python code development among other skills.

0101	Don DeVoe	Seats (Total: 30)
	MW 3:30pm - 4:45pm	ONLINE

ENME442 **Information Security**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must have Senior standing in engineering; and permission of ENGR-Mechanical Engineering department. Jointly offered with ENRE684 . Credit only granted for: ENRE648J, ENME442, ENRE684, or ENPM808E.

The materials presented are divided into three major components: overview, detailed concepts and implementation techniques. The topics to be covered are: general security concerns and concepts from both a technical and management point of view, principles of security, architectures, access control and multi-level security, trojan horses, covert channels, trap doors, hardware security mechanism, security models, security kernels, formal specifications and verification, networks and distribution systems and risk analysis.

0101	Michel Cukier	Seats (Total: 24)
	TuTh 9:30am - 10:45am	ESJ 0215

ENME444 **Assistive Robotics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME351. Restriction: Permission of ENGR-Mechanical Engineering department.

Fundamentals of assistive robots used in a wide varietyof ways to help humans with disabilities. Three application areas will be covered: (1) Rehabilitation robotics to recover motor function from neurologic injuries such as stroke, (2) Prosthetics to enable mobility function in amputees, and (3) Social robotics for cognitive impairment and developmental disorders such as autism. Theory behind different control systems employed by assistive robotics, as well as the mechanical design, sensors & actuators, and user interfaces behind representative robots in the respective areas. Guidelines for designing assistive robots. Ethical and regulatory considerations in the design of assistive robots.

0101	James Borrelli	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

ENME454 **Vehicle Dynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: ENME361. Restriction: Permission of ENGR-Mechanical Engineering department.

The fundamentals of passenger vehicle and light truck design and vehicle dynamics are covered. The engineering principles associated with acceleration, braking, handling, ride quality, aerodynamics, and tire mechanics are discussed, as well as suspension and steering design.

0101	Vincent Nguyen MW 3:30pm - 4:45pm	Seats (Total: 66) ONLINE	

ENME462 **Vibrations, Controls, and Optimization II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME351 and ENME361.

Continuation of ENME 361. Fundamentals of vibration, controls, and optimization. Analysis and design in time, Laplace and frequency domains. Mathematical descriptions of system response, system stability, control and optimization. Optimal design of mechanical systems.

Delivered via ITV.

0101	Amr Baz MW 10:00am - 10:50am W 1:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0102	Amr Baz MW 10:00am - 10:50am F 3:00pm - 4:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0103	Amr Baz MW 10:00am - 10:50am F 10:00am - 11:50am	Seats (Total: 40) ONLINE ONLINE	 Discussion
0201	Nikhil Chopra MW 10:00am - 10:50am W 1:00pm - 2:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion
0202	Nikhil Chopra MW 10:00am - 10:50am M 11:00am - 12:50pm	Seats (Total: 40) ONLINE ONLINE	 Discussion

ENME467 **Engineering for Social Change**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must not be in Engineering: Mechanical program; and junior standing or higher; and must be in a major in ENGR-A. James Clark School of Engineering. Cross-listed with ENES467. Credit only granted for: ENME467 or ENES467.

Critical analysis of issues at the intersection of engineering, philanthropy and social change. How engineering design, products and processes have created social change in the past and will do so in the future through both intended and unintended consequences. Topics covered include energy, sustainability and climate change, autonomy, the digital future, low cost engineering, manufacturing, philanthropy, ethics and the impact of electronics on society, among others. Faculty and external experts will engage with students on these topics. Students will broadly engage with organizations involved in using technology for positive social impact.

Cross-listed with ENES467. Credit granted for ENME467 or ENES467.

0101	Davinder Anand, Sami Ainane F 11:00am - 1:40pm	Seats (Total: 45) ONLINE	

ENME470 **Finite Element Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Senior standing; and permission of ENGR-Mechanical Engineering department.

Basic concepts of the theory of the finite element method. Applications in solid mechanics and heat transfer.

0101	Peter Chung TuTh 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 24) ESJ 0202 ONLINE	Lab
0102	Peter Chung TuTh 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 24) ESJ 0202 ONLINE	Lab
FR01	Peter Chung TuTh 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 10) Location: TBA ONLINE	Lab

ENME472 **Integrated Product and Process Development**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS

Prerequisite: ENME331, ENME361, ENME351, and ENME371; and must have completed or be concurrently enrolled in ENME332. Restriction: Permission of the Department of Mechanical Engineering.

Integration of product development with the development process. Design strategies. Product architecture. Design for manufacturing. Selection of materials. Design for assembly.

0101	Hugh Bruck Tu 12:00pm - 1:50pm TuTh 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Monifa Vaughn-Cooke Th 12:00pm - 1:50pm TuTh 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0103	Elisabeth Smela W 4:00pm - 5:50pm TuTh 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0104	Shapour Azarm F 1:00pm - 2:50pm TuTh 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0106	Linda Schmidt Tu 2:00pm - 3:50pm TuTh 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion

ENME473 **Mechanical Design of Electronic Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Design considerations in the packaging of electronic systems. Production of circuit boards and design of electronic assemblies. Vibration, shock, fatigue and thermal considerations.

Delivered via ITV.

0101	Bongtae Han MW 2:00pm - 3:15pm	Seats (Total: 25) ONLINE	

ENME488 **Special Problems**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced problems in mechanical engineering with special emphasis on mathematical and experimental methods.

Limited to mechanical engineering seniors.

Contact department for information to register for this course.

ENME489 **Special Topics in Mechanical Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Contact department for information to register for this course.

ENME489A **Special Topics in Mechanical Engineering; Optimal Control of Energy Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite - ENME 462

0101	Hosam Fathy TuTh 3:30pm - 4:45pm	Seats (Total: 10) MMH 1400
0201	Hosam Fathy Class time/details on ELMs	Seats (Total: 10) ONLINE

ENME489F **Special Topics in Mechanical Engineering; Dynamics of Atmospheric Flight**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite: ENME331.

0101	David Findlay W 3:30pm - 6:10pm	Seats (Total: 10) ONLINE

ENME489G **Special Topics in Mechanical Engineering; Manufacturing Processes and Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisites: ENME382; and permission of department.

0101	Ho Yeung	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ONLINE

ENME489J **Special Topics in Mechanical Engineering; Numerical Methods in Engineering**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

0101	Johan Larsson	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ONLINE

ENME489U **Special Topics in Mechanical Engineering; Fluid Structure Interactions**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisites: ENME 361 and ENME 331.

0101	Eleonora Tubaldi	Seats (Total: 10)
	TuTh 9:30am - 10:45am	ONLINE

ENME489X **Special Topics in Mechanical Engineering; Energy Conversion Systems for Sustainability**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite: ENES232.

0101	Ashwani Gupta	Seats (Total: 65)
	Th 4:00pm - 6:40pm	ONLINE

ENME489Z **Special Topics in Mechanical Engineering; Structural Mechanics - Aerospace Applications**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite: ENES220 and MATH246. Restriction: permission of department.

Contact department for information to register for this course.

ENME605 **Advanced Systems Control**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENME462; or permission of instructor.

Modern control theory for both continuous and discrete systems. State space representation is reviewed and the concepts of controllability and observability are discussed. Design methods of deterministic observers are presented and optimal control theory is formulated. Control techniques for modifying system characteristics are discussed.

0101	Jin-Oh Hahn	Seats (Total: 25)
	MW 12:30pm - 1:45pm	ONLINE

ENME610 **Engineering Optimization**

Credits: 3 Grading Method: Regular, Audit

Overview of applied single- and multi- objective optimization and decision making concepts and techniques with applications in engineering design and/or manufacturing problems. Topics include formulation examples, concepts, optimality conditions, unconstrained/constrained methods, and post-optimality sensitivity analysis. Students are expected to work on a semester-long real-world multi-objective engineering project.

0101	Shapour Azarm	Seats (Total: 25)
	Tu 4:00pm - 6:40pm	ONLINE

ENME631 **Advanced Conduction and Radiation Heat Transfer**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENME332; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Theory of conduction and radiation. Diffused and directional, poly- and mono-chromatic sources. Quantitative optics. Radiation in enclosures. Participating media. Integrodifferential equations. Multidimensional, transient and steady-state conduction. Phase change. Coordinate system transformations.

0101	Bao Yang MW 2:00pm - 3:15pm	Seats (Total: 25) ONLINE

ENME640 **Fundamentals of Fluid Mechanics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed partial differential equations at the level of MATH 462; or permission of ENGR-Mechanical Engineering department. Formerly: ENME651.

Equations governing the conservation of mass, momentum, vorticity and energy in fluid flows. Low Reynolds number flows. Boundary layers. The equations are illustrated by analyzing a number of simple flows. Emphasis is placed on physical understanding to facilitate the study of advanced topics in fluid mechanics.

0101	James Duncan MW 3:30pm - 4:45pm	Seats (Total: 30) ONLINE

ENME662 **Linear Vibrations**

Credits: 3 Grading Method: Regular, Audit

Development of equations governing small oscillations and spatially continuous systems. Newton's equations, Hamilton's principle, and Lagrange's equations. Free and forced vibrations of mechanical systems. Modal analysis. Finite element discretization and reductions of continuous systems. Numerical methods. Random vibrations.

0101	Amr Baz TuTh 5:00pm - 6:15pm	Seats (Total: 30) ONLINE

ENME670 **Continuum Mechanics**

Credits: 3 Grading Method: Regular, Audit

Mechanics of deformable bodies, finite deformation and strain measures, kinematics of continua and global and local balance laws. Thermodynamics of continua, first and second laws. Introduction to constitutive theory for elastic solids, viscous fluids and memory dependent materials. Examples of exact solutions for linear and hyper elastic solids and Stokesian fluids.

0101	Teng Li Class time/details on ELMs	Seats (Total: 25) ONLINE

ENME690 **Mechanical Fundamentals of Electronic Systems**

Credits: 3 Grading Method: Regular, Audit

An understanding of the fundamental mechanical principles used in design of electronic devices and their integration into electronic systems will be provided. Focus will be placed on the effect of materials compatibility, thermal stress, mechanical stress, and environmental exposure on product performance, durability and cost. Both electronic devices and package assemblies will be considered. Analysis of package assemblies to understand thermal and mechanical stress effects will be emphasized through student projects.

0101	Bongtae Han MW 2:00pm - 3:15pm	Seats (Total: 25) ONLINE
0201	Bongtae Han Class time/details on ELMs	Seats (Total: 15) ONLINE
RE01	Bongtae Han Class time/details on ELMs	Seats (Total: 5) ONLINE

ENME701 **Sustainable Energy Conversion and the Environment**

Credits: 3 Grading Method: Regular, Audit

Recommended: ENME633. Credit only granted for: ENME701, ENME706 or ENME808D. Formerly: ENME706 and ENME808D.

Discussion of the major sources and end-uses of energy in our society with particular emphasis on renewable energy production and utilization. Introduces a range innovative technologies and discusses them in the context of the current energy infrastructure. Renewable sources such as wind and solar are discussed in detail. Particular attention is paid to the environmental impact of the various forms of energy.

0101	K Radermacher, Jiazhen Ling Tu 4:00pm - 6:40pm	Seats (Total: 25) ONLINE
0201	K Radermacher, Jiazhen Ling Class time/details on ELMs	Seats (Total: 10) ONLINE

ENME737 **Prognostics and Health Management**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENME737 or ENME808A. Formerly: ENME808A.

Prognostics and health management (PHM) is an enabling discipline consisting of technologies and methods to assess the reliability of a product in its actual life cycle conditions to determine the advent of failure and mitigate system risk. PHM permits the reliability of a system to be evaluated and predicted in its actual application conditions. In recent years, prognostics and health management (PHM) has emerged as a key enabling technology to provide an early warning of failure; to forecast maintenance as needed; to reduce maintenance cycles; to assess the potential for life extensions; and to improve future designs and qualification methods. In future, PHM will enable systems to assess their own real-time performance (self-cognizant health management and diagnostics) under actual usage conditions and adaptively enhance life cycle sustainment with risk-mitigation actions that will virtually eliminate unplanned failures.

0101	Michael Pecht M 9:30am - 12:10pm	Seats (Total: 25) ONLINE
0201	Michael Pecht Class time/details on ELMs	Seats (Total: 10) ONLINE
RE01	Michael Pecht Class time/details on ELMs	Seats (Total: 10) ONLINE

ENME741 **Operations Research Models in Engineering**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: (ENCE302; or (ENME271 and ENME392)); and (MATH140 and MATH240). Or permission of instructor. Credit only granted for: ENME738, ENME741, or ENCE603. Formerly: ENME738.

A survey of the fundamentals of operations research models and methods in engineering including: optimization using linear programming, nonlinear programming, integer programming, as well as equilibrium/game theory via mixed complementarity problems. Examples of specialized course items include: specifics of optimizing power and gas networks, discussion of other network optimization problems, resource-constrained problems, two-level optimization as an example of mixed integer nonlinear programming (MINLP) programming problems as well as algorithms to solve the above types of problems."

Jointly offered with ENRE689E. Additional note: For Fall 2018 credit is only granted for ENME738, ENME741, ENRE808E, ENCE603. Formerly: ENME738.

0101	Steven Gabriel M 4:00pm - 5:00pm W 9:30am - 11:00am	Seats (Total: 15) ONLINE ONLINE

0201	Steven Gabriel Class time/details on ELMs	Seats (Total: 10) ONLINE
RE01	Steven Gabriel Class time/details on ELMs	Seats (Total: 10) ONLINE

ENME743 **Applied Machine Learning for Engineering and Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed undergraduate level Statistics (ENME392 or equivalent), or permission of the instructor. Credit only granted for: ENME440, ENME808E OR ENME743.

Learn how to apply techniques from Artificial Intelligence and Machine Learning to solve engineering problems and design new products or systems. Design and build a personal or research project that demonstrates how computational learning algorithms can solve difficult tasks in areas you are interested in. Master how to interpret and transfer state-of-the-art techniques from computer science to practical engineering situations and make smart implementation decisions.

0101	Mark Fuge TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE

ENME744 **Additive Manufacturing**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENME272 and ENME331; or students who have taken courses with comparable content may contact the department. Jointly offered wit h ENME416. Credit only granted for: ENME 416 OR ENME 744.

Develop a comprehensive understanding of fundamental additive manufacturing-alternatively, "three-dimensional (3D) printing-approaches, including extrusion-based deposition, stereolithography, powder bed-based melting, and inkjet-based deposition. Cultivate a "design-for-additive manufacturing" skill set for combining computer-aided design (CAD) and computer-aided manufacturing (CAM) methodologies to produce successful 3D prints. Fabricate 3D mechanical objects using a variety of 3D printing technologies on campus. Execute a design project that demonstrates how additive manufacturing technologies can overcome critical limitations of traditional manufacturing processes.

0101	Ryan Sochol Class time/details on ELMs	Seats (Total: 15) ONLINE

ENME745 **Numerical Methods in Engineering**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENME745 and ENME808B. Formerly: ENME808B.

Fundamental aspects of how to apply analytical mathematical concepts to discrete data. The course is aimed at graduate students in any area of engineering, and treats the material in a general manner that is not specific to any application or field of specialization.

0101	Johan Larsson	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ONLINE

ENME780 **Mechanical Design of High Temperature and High Power Electronics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENME382, ENME473, or ENME690.

This course will discuss issues related to silicon power device selection (IGBT, MCT, GTO, etc.), the characteristics of silicon device operation at temperatures greater thatn 125C, and the advantages of devices based on SOI and SiC. It will also discuss passive components and packaging materials selection for distributing and controlling power, focusing on the critical limitations to use of many passive components and packaging materials at elevated temperatures. In addition it will cover packaging techniques and analysis to minimize the temperature elevation caused by power dissipation. Finally, models for failure mechanisms in high temperature and high power electronics will be presented together with a discussion of design options to mitigate their occurrence.

0101	Patrick McCluskey	Seats (Total: 25)
	MW 5:00pm - 6:15pm	ONLINE

ENME799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENME808 **Advanced Topics in Mechanical Engineering**

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

ENME808T **Advanced Topics in Mechanical Engineering; Network Control Systems**

Credits: 3 Grading Method: Regular, Audit

0101	Yancy Diaz-Mercado MW 3:30pm - 4:45pm	Seats (Total: 30) ONLINE

ENME809B **Special Topics; Optimal Control of Energy Systems**

Credits: 3 Grading Method: Regular, Audit

N/A

0101	Hosam Fathy TuTh 3:30pm - 4:45pm	Seats (Total: 20) MMH 1400
0201	Hosam Fathy Class time/details on ELMs	Seats (Total: 10) ONLINE

ENME809C **Special Topics; Fluid Structure Interactions**

Credits: 3 Grading Method: Regular, Audit

N/A

Prerequisites: ENME 361 and ENME 331.

0101	Eleonora Tubaldi TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE

ENME898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENME899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENPM Engineering, Professional Masters Fall 2020

ENPM600 **Probability and Stochastic Processes for Engineers**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Undergraduate introduction to discrete and continuous probability.

Axioms of probability; conditional probability and Bayes' rule; random variables, probability distributions and densities; functions of random variables; definition of stochastic process; stationary processes, correlation functions, and power spectral densities; stochastic processes and linear systems; estimation and optimum filtering. Applications in communication and control systems, signal processing, and detection and estimation.

0101	C Ravishankar	Seats (Total: 29)
	M 7:00pm - 9:40pm	ONLINE

ENPM610 **Digital VLSI Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed undergraduate courses in solid state devices and digital/analog circuit design.

VLSI design with emphasis on CMOS technology. Logic functions using CMOS switches; MOSFET characteristics; BiCMOS, dynamic logic and domino logic structures; PLA's, FPLA's, and gate arrays; layout via MAGIC, use of VHDL, IRSIM, and Spice; design rules and verification techniques; packaging techniques; chip design options: standard cells, sea-of-gates, full custom; design capture and verification tools; design of CMOS datapaths, memory, and control; possible fabrication via MOSIS.

0101	Manoj Franklin	Seats (Total: 25)
	Tu 4:00pm - 6:40pm	ONLINE

ENPM611 **Software Engineering**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Competency in one programming language; and must have completed an undergraduate software engineering course.

Software engineering concepts, methods, and practices important to both the theorist and the practitioner will be covered. The entire range of responsibilities expected of a software engineer are presented. The fundamental areas of requirements development, software design, programming languages, and testing are covered extensively. Sessions on supporting areas such as systems engineering, project management, and software estimation are also included.

0101	Christopher Ackermann	Seats (Total: 40)
	M 4:00pm - 6:40pm	ONLINE

ENPM613 **Software Design & Implementation**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENPM611. Restriction: Permission of Maryland Applied Graduate Engineering.

Software design concepts and practices within the field important to both the practitioner and the theorist will be covered. Architectural and detailed designs are included for batch, client/server, and real-time systems. Design considerations for structured, object-oriented, and Web-based systems are covered. Design of databases, user interfaces, forms, and reports are also included. Implementation issues that affect the design, including error handling, performance, and inter-process communication, are presented.

0101	Ioana Rus	Seats (Total: 38)
	Th 7:00pm - 9:40pm	ONLINE

ENPM616 **Wireless Communications: Concepts and Technologies**

Credits: 3

Grading Method: Regular, Audit

Advanced topics in wireless communications for voice, data, and multimedia. Overview of current wireless systems and standards followed by characterizing the wireless channel, including path loss for different environments, random log-normal shadowing due to signal attenuation, and the flat and frequency-selective properties of multipath fading. Fundamental capacity limits of wireless channels and the characteristics of the capacity-achieving transmission strategies. Overview of wireless networks, including multiple and random access techniques, WLANs, cellular system design, and ad-hoc network design. Applications for these systems, including the evolution of cell phones and PDAs, smart homes and appliances, sensor networks, and automated highways and skyways.

0101	Kamran Etemad	Seats (Total: 25)
	M 4:00pm - 6:40pm	ONLINE

ENPM617 **Compilers**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: ENPM808T, ENEE645, or ENPM617. Formerly: ENPM808T.

Covers the underlying techniques of Compiler Construction and introduces the theory and tools that can be employed in order to perform syntax-directed translation of a high-level programming language into an executable code.

0101	Jerry Wu	Seats (Total: 25)
	Th 4:00pm - 6:40pm	ONLINE

ENPM622 **Energy Conversion I - Stationary Power**

Credits: 3 Grading Method: Regular, Audit

Thermal engineering of modern power generation systems. Cycle analysis of various modern power generation technologies including gas turbine, combined cycle, waste burning and cogeneration. Energy storage and energy transport.

0101	Patrick Caton	Seats (Total: 29)
	Th 7:00pm - 9:40pm	ONLINE

ENPM631 **TCP/IP Networking**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENPM602; or permission of instructor. And permission of ENGR-CDL-Office of Advanced Engineering Education.

Describe how IP datagram travels through the internet and are routed from the source to the destination. Introduce the two transport protocols: UDP and TCP, the proper context to use each one, and related parameters and issues. Cover some other protocols, closely related to the TCP/IP that are responsible for the seamless operation of the Internet.

0101	Pedram Fard	Seats (Total: 25)
	W 7:00pm - 9:40pm	ONLINE

ENPM640 **Rehabilitation Robotics**

Credits: 3 Grading Method: Regular, Audit

Recommended: Basic understanding of linear time-invariant control systems (e.g. ENPM667) is preferred but not required. No background or previous experience in assistive robotics, human biomechanics, and/or neuroscience is required. Credit only granted for: ENPM808J, ENPM640, or ENME444. Formerly: ENPM808J.

An introduction to a field of robotics dedicated to improving the lives of people with disabilities. The course is designed for students wishing to learn more about rehabilitation robotics, one of the fasting growing fields of robotics. Rehabilitation robotics is the application of robots to overcome disabilities resulting from neurologic injuries and physical trauma, and improve quality of life. This course considers not only engineering design and development, but also the human factors that make some innovative technologies successful and others commercial failures. Engineering innovation by itself, without considering other factors such as evidence-based R&D and product acceptance, may mean that some technologies don't become or remain available or are inefficacious to aid their intended beneficiaries. This course differs from medical robotics in its focus on improving the quality of life through robot-mediated rehabilitation treatments, rather than improving or enhancing applications such as surgical interventions.

0101	Anindo Roy Tu 4:00pm - 6:40pm Class time/details on ELMs	Seats (Total: 38) JMP 3201 ONLINE
0201	Anindo Roy Class time/details on ELMs	Seats (Total: 20) ONLINE

ENPM645 **Human-Robot Interaction**

Credits: 3 Grading Method: Regular, Audit

Recommended: Some knowledge of A.I. fundamentals and data analytics recommended, but not required. Credit only granted for: ENPM808K or ENPM645. Formerly: ENPM808K.

To define the intersection of human-robot interactions to include human-computer interfaces, as well as robotic emotions and facial expressions emulations. The result will provide a basis for students to assess the best approaches for interacting effectively with robots. Areas to be covered include biologically-inspired robotics, cognitive robotics, cultural and social aspects of robotics, data mining, examples of human systems interfaces, and machine learning with respect to A.I. principles and limitations.

0101	Josef Schaff Th 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 46) JMP 3201 ONLINE
0201	Josef Schaff Class time/details on ELMs	Seats (Total: 20) ONLINE

ENPM651 **Heat Transfer for Modern Application**

Credits: 3 Grading Method: Regular, Audit

The applications selected will vary widely: from cooling of electronics to prevention of fog and stalagmite formation in ice rinks. Multi-mode (i.e. simultaneous conduction, convection, radiation, mass transfer) problems will be emphasized. Lectures on basic principles, followed by assignments in which students formulate solutions and explain results.

0101	Yunho Hwang	Seats (Total: 20)
	Th 4:00pm - 6:40pm	ONLINE

ENPM660 **Wind Energy Engineering**

Credits: 3 Grading Method: Regular, Audit

An examination of four central topics in wind energy engineering: the nature of wind energy as a resource for generating electricity; the aerodynamics of wind turbines by which the wind energy is converted into mechanical energy; the mechanics and dynamics of the wind energy system (tower, rotor, hub, drive train, and generator); and the electrical aspects of wind turbines. Additional topics to be included in the course include:Wind turbine design; wind turbine control; wind turbine siting, system design, and integration; Wind energy system economics; and wind energy systems environmental impacts and aspects. The course is intended to pass along substantial subject matter knowledge and skills, it can only be treated as an introduction to this extensive, multidisciplinary topic. However, students are expected to emerge with a substantial knowledge of wind energy systems and the methods used to analyze such systems.

0101	James Turso	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ENPM662 **Introduction to Robot Modeling**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENPM662 or ENPM808M. Formerly: ENPM808M.

This course introduces basic principles for modeling a robot. Most of the course is focused on modeling manipulators based on serial mechanisms. The course begins with a description of the homogenous transformation and rigid motions. It then introduces concepts related to kinematics, inverse kinematics, and Jacobians. This course then introduces Eulerian and Lagrangian Dynamics. Finally, the course concludes by introducing basic principles for modeling manipulators based on parallel mechanisms. The concepts introduced in this course are subsequently utilized in control and planning courses.

0101	Reza Monfaredi	Seats (Total: 46)
	W 4:00pm - 6:40pm	ONLINE

ENPM667 **Control of Robotic Systems**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: ENPM667 or ENPM808Q. Formerly: ENPM808Q.

This is a basic course on the design of controllers for robotic systems. The course starts with mainstay principles of linear control, including a review of elementary concepts of systems, and discusses applications to independent joint control. The second part of the course introduces a physics-based approach to control design that uses energy and optimization principles to tackle the design of controllers that exploit the underlying dynamics of robotic systems. The course ends with an introduction to force control and basic principles of geometric control if time allows.

0201	Waseem Malik M 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 50) JMP 3201 ONLINE
0301	Waseem Malik Class time/details on ELMs	Seats (Total: 20) ONLINE

ENPM670 **Advanced Energy Audit and Conservation**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

Prerequisite: Students are expected to have prior knowledge of undergraduate basic thermodynamics, heat transfer, and thermal transport/heat transfer processes. Knowledge of electrical systems and controls is desirable.

Students will be provided with current and future trends in energy resources and technologies while providing them with the necessary skills to conduct energy audit/analysis on both commercial and residential facilities. Energy accounting procedures for electrical, mechanical and HVAC systems will be covered in detail, along with economics/life-cycle costing analysis. Fundamental building science principles will be introduced in the context of energy auditing. Students will gain hands on experience conducting an energy audit project through assigned projects. Annual building simulation tools, such as EnergyPlus and eQuest, will be introduced. This is an applied course. Successful completion of this course will equip students with the terminology, knowledge and practical experience necessary to perform energy audits in both residential and commercial buildings.

0101	Michael Ohadi, Kyosung Choo M 7:00pm - 9:40pm	Seats (Total: 17) ONLINE

ENPM672 **Fundamentals for Thermal Systems**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Undergraduate engineering, physics or chemistry degree. Restriction: Permission of Maryland Applied Graduate Engineering.

Included in this course is an introduction to thermodynamics, fluid mechanics and heat transfer. Emphasis is on gaining an understanding of the physical concepts through the solving of numerical problems associated with simple thermal fluid processes and cycles. Both ideal gases and multiphase fluids will be considered as the working fluids.

0101	Mohammad Ali	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ENPM677 **Wireless Sensor Networks**

Credits: 3 Grading Method: Regular, Audit

Focuses on networking aspects, protocols and architectures for Wireless Sensor Networks. Provides a thorough description of the most important issues and questions that have to be addressed in a wireless sensor neto work.

0101	Sasan Haghani	Seats (Total: 17)
	Tu 7:00pm - 9:40pm	ONLINE

ENPM687 **Digital Forensics and Incidence Responses**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Experience with both Windows and Unix-based operating systems, including using the command line. Credit only granted for: ENPM808P or ENPM687. Formerly: ENPM808P.

Students will implement a robust incident response methodology, including proper forensic handling of evidence, and cover legal aspects of national and international law regarding forensics. The bulk of the course covers evidence acquisition, preservation, analysis and reporting on multiple platforms.

0101	Jonas Amoonarquah	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

ENPM691 **Hacking of C programs and Unix Binaries**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE150; or students who have taken courses with comparable content may contact the department.

Teaches the fundamentals of secure programming in C. An in depth discussion on various security vulnerabilities (e.g., buffer overflows) in C applications will be taught with hands-on demo of concepts during the class. Students will learn how a C program runs "under-the-hood". The course will teach nitty-gritty of C programs by analyzing at the assembly level. The course discusses best practices (e.g., coding standards) and design principles for secure programming so that security can be built-in during design time. In addition to assignments, students are required to present papers related to this course.

0101	Dharmalingam Ganesan	Seats (Total: 52)
	Th 7:00pm - 9:40pm	ONLINE

ENPM694 **Networks and Protocols**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENPM694 or ENPM808A. Formerly: ENPM808A.

Provides a deep understanding of TCP/IP protocol suit and routing in the internet. The course topics are: overview of TCP/IP, basics of IP protocol, basics of TCP protocol, Network Address Translation (NAT), Dynamic Host Configuration Protocol (DHCP), Internet Protocol Security (IPsec), Internet Control Message Protocol (ICMP), Simple Mail Transfer Protocol (SMTP), Domain Name Service (DNS), IPv6, Concepts of routing (Bellman-Ford and Dijkstra algorithms), Routing Information Protocol (RIP), Open Shortest Path First (OSPF), Interior Gateway Routing Protocol (IGRP), Enhance Gateway Routing Protocol (EIGRP), and Border Gateway Protocol (BGP).

0101	Majid Raissi-Dehkordi	Seats (Total: 75)
	M 7:00pm - 9:40pm	ONLINE

ENPM696 **Reverse Software Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENPM691 and CMSC106; or permission of instructor. And permission of ENGR-CDL-Office of Advanced Engineering Education. Credit only granted for: ENPM808F or ENPM696. Formerly: ENPM808F.

An in-depth understanding of software reverse engineering concepts and hands-on training with reverse engineering tools, including disassemblers, decompilers, and code analyzers. Students will become familiar with both low-level software and the x86 instruction set through binary reversing sessions. This course also provides insights into many subjects such as system security, source code analysis, software design, and program understanding that will be beneficial in a variety of fields.

0101	Allen Hazelton	Seats (Total: 75)
	W 4:00pm - 6:40pm	ONLINE

ENPM808 **Advanced Topics in Engineering**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professional master of engineering program. May be taken for repeated credit when identified by topic title.

0101	George Syrmos Contact instructor or department for details.	Seats (Total: 40)
0201	George Syrmos Contact instructor or department for details.	Seats (Total: 50)
0301	Manoj Franklin Contact instructor or department for details.	Seats (Total: 1)

ENPM808A **Advanced Topics in Engineering; Introduction to Machine Learning**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professional master of engineering program. May be taken for repeated credit when identified by topic title.

0101	Nikhil Chopra Tu 4:00pm - 6:40pm	Seats (Total: 50) ONLINE

ENPM808J **Advanced Topics in Engineering; Design of Experiments**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professional master of engineering program. May be taken for repeated credit when identified by topic title.

0101	Tony Barber Th 7:00pm - 9:40pm	Seats (Total: 17) ONLINE

ENPM808O **Advanced Topics in Engineering; AI-Based Software Systems**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professional master of engineering program. May be taken for repeated credit when identified by topic title.

0101	Mikael Lindvall W 7:00pm - 9:40pm	Seats (Total: 50) ONLINE

ENPM808P **Advanced Topics in Engineering; Printed Electronics**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professional master of engineering program. May be taken for repeated credit when identified by topic title.

0101	Siddhartha Das M 4:00pm - 6:40pm	Seats (Total: 17) ONLINE

ENPM808W **Advanced Topics in Engineering; Data Science**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professional master of engineering program. May be taken for repeated credit when identified by topic title.

0101	A Seyed W 7:00pm - 9:40pm	Seats (Total: 50) ONLINE

ENPM808X **Advanced Topics in Engineering; Software Development for Robotics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professional master of engineering program. May be taken for repeated credit when identified by topic title.

Prerequisite: ENPM809Y or equivalent

0101	Daniel Lofaro Tu 7:00pm - 9:40pm	Seats (Total: 50) ONLINE

ENPM809A **Special Topics in Engineering; Applied Cryptography**

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Dharmalingam Ganesan	Seats (Total: 50)
	Th 4:00pm - 6:40pm	ONLINE

ENPM809B **Special Topics in Engineering; Building a Manufacturing Robot Software System**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Zeid Kootbally, Craig Schlenoff	Seats (Total: 35)
	W 7:00pm - 9:40pm	ONLINE
	Class time/details on ELMs	ONLINE

ENPM809F **Special Topics in Engineering; Internet of Things**

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Nof Abu Zainab	Seats (Total: 50)
	Th 7:00pm - 9:40pm	ONLINE

ENPM809J **Special Topics in Engineering; Cloud Security**

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Kevin Shivers	Seats (Total: 115)
	Tu 7:00pm - 9:40pm	ONLINE

ENPM809N **Special Topics in Engineering; Data Mining**

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Deogratias Kibira Tu 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 25) JMP 3201 ONLINE
0201	Deogratias Kibira Class time/details on ELMs	Seats (Total: 20) ONLINE

ENPM809Y **Special Topics in Engineering; Introductory Robot Programming**

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Zeid Kootbally Th 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 80) ONLINE ONLINE

ENRE Reliability Engineering Fall 2020

ENRE489 **Special Topics in Reliability Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in reliability engineering.

Contact department for information to register for this course.

ENRE600 **Fundamentals of Failure Mechanisms**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Cross-listed with ENMA626. Credit only granted for: ENMA626, ENMA698M, ENMA698R, or ENRE600.

Advanced failure mechanisms in reliability engineering wiil be taught from a basic materials and defects point of view. The methods of predicting the physics of failure of devices, materials, components and systems are reviewed. The main emphasis will be given to basic degradation mechanisms through understanding the physics, chemistry, and mechanics of such mechanisms. Mechanical failures are introduced through understanding fatigue, creep and yielding in materials, devices and components. The principles of cumulative damage and mechanical yielding theory are taught. The concepts of reliability growth, accelerated life testing, environmental testing are introduced. Physical, chemical and thermal related failures are introduced through a basic understanding of degradation mechanisms such as diffusion, electromigration, defects and defect migration. The failure mechanisms in basic material types will be taught. Failure mechanisms observed in real electronic devices and electronic packaging will also be presented. Problems related to manufacturing, and microelectronics will be analyzed. Mechanical failures are emphasized from the point of view of complex fatigue theory.

Sections that begin with a letter are taught via ITV and are not intended for College Park campus students.

0101	Abhijit Dasgupta M 1:00pm - 3:40pm	Seats (Total: 20) ONLINE
0201	Abhijit Dasgupta Class time/details on ELMs	Seats (Total: 20) ONLINE
RE01	Abhijit Dasgupta Class time/details on ELMs	Seats (Total: 4) ONLINE
SM01	Abhijit Dasgupta Class time/details on ELMs	Seats (Total: 5) ONLINE

ENRE602 **Principles of Reliability Analysis**

Credits: 3 Grading Method: Regular, Audit

Cross-listed with ENNU652. Credit only granted for: ENRE602 or ENNU652.

Principal methods of reliability analysis, including fault tree and reliability block diagrams; Failure Mode and Effects Analysis (FMEA); event tree construction and evaluation; reliability data collection and analysis; methods of modeling systems for reliability analysis. Focus on problems related to process industries, fossil-fueled power plant availability, and other systems of concern to engineers.

Sections that begin with a letter are taught via ITV and are not intended for College Park campus students.

0101	Katrina Groth W 1:00pm - 3:40pm	Seats (Total: 10) JMP 2217

0201	Katrina Groth Class time/details on ELMs	Seats (Total: 20) ONLINE
RE01	Katrina Groth Class time/details on ELMs	Seats (Total: 10) ONLINE

ENRE641 **Probabilistic Physics of Failure and Accelerated Testing**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENRE641 or ENRE650. Formerly: ENRE650.

Models for life testing at constant stress. Graphical and analytical methods. Test plans for accelerated testing. Competing failure modes and size effects. Models and data analyses for step and time varying stresses. Optimizing of test plans.

0101	Mohammad Modarres Th 11:00am - 1:40pm	Seats (Total: 13) JMP 2222
0201	Mohammad Modarres Class time/details on ELMs	Seats (Total: 15) ONLINE
RE01	Mohammad Modarres Class time/details on ELMs	Seats (Total: 15) ONLINE

ENRE648 **Special Problems in Reliability Engineering**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

For students who have definite plans for individual study of approved problems. Credit given according to extent of work.

Contact department for information to register for this course.

ENRE648C **Special Problems in Reliability Engineering; Reliability and Failure Mechanisms of Nanosystems**

Credits: 3 Grading Method: Regular, Audit

For students who have definite plans for individual study of approved problems. Credit given according to extent of work.

0101	Aristos Christou MW 1:00pm - 2:15pm	Seats (Total: 25) ONLINE

0201	Aristos Christou Class time/details on ELMs	Seats (Total: 10) ONLINE
RE01	Aristos Christou Class time/details on ELMs	Seats (Total: 5) ONLINE

ENRE648J **Special Problems in Reliability Engineering; Prognostics and Health Management**

Credits: 3 Grading Method: Regular, Audit

For students who have definite plans for individual study of approved problems. Credit given according to extent of work.

0101	Michael Pecht M 9:30am - 12:10pm	Seats (Total: 25) ONLINE
0201	Michael Pecht Class time/details on ELMs	Seats (Total: 10) ONLINE
RE01	Michael Pecht Class time/details on ELMs	Seats (Total: 10) ONLINE

ENRE655 **Advanced Methods in Reliability Modeling**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENRE602. Credit only granted for: ENRE655 or ENRE665. Formerly: ENRE665.

Bayesian methods and applications, estimation of rare event frequencies, uncertainty analysis and propagation methods, reliability analysis of dynamic systems, analysis of dependent failures, reliability of repairable systems, human reliability analysis methods and theory of logic diagrams and application to systems reliability.

Contact department for information to register for this course.

ENRE670 **Probabilistic Risk Assessment**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENRE602.

Why study risk, sources of risk, overview of Risk Assessment and Risk Management, relation to System Safety and Reliability Engineering; measures, representation, communication, and perception of risk; overview of use of risk assessment results in decision making; overview of Probabilistic Risk Assessment (PRA) process; detailed converge of PRA methods including (1) methods for risk scenario development such as identification of initiators, event sequence diagrams, event trees, causal modeling (fault trees, influence diagrams, and hybrid methods), and simulation approaches; (2) methods of risk scenario likelihood assessment, including quantitative and qualitative approaches, as well as uncertainty modeling and analysis. Also covers methods for risk modeling of system hardware behavior, physical phenomena, human behavior, software behavior, organizational environment, and external physical environment. Additional core topics include risk model integration and quantification (Boolean-based, binary decsion diagram, Bayesian belief networks, and hybrid methods), simulation-based Dynamic PRA methods (discrete and continuous) and several examples of large scale PRAs for space missions, nuclear power, aviation and medical systems.

0101	Mohammad Modarres Th 3:00pm - 5:40pm	Seats (Total: 17) ONLINE
0201	Mohammad Modarres Class time/details on ELMs	Seats (Total: 15) ONLINE
RE01	Mohammad Modarres Class time/details on ELMs	Seats (Total: 10) ONLINE

ENRE684 **Information Security**

Credits: 3 Grading Method: Regular, Audit

Jointly offered with ENME442. Credit only granted for: ENME442, ENRE648 J, or ENRE684. Formerly: ENRE648J.

This course is divided into three major components: overview, detailed concepts and implementation techniques. The topics to be covered are: general security concerns and concepts from both a technical and management point of view, principles of security, architectures, access control and multi-level security, trojan horses, covert channels, trap doors, hardware security mechanism, security models, security kernels, formal specifications and verification, networks and distribution systems and risk analysis.

0101	Michel Cukier TuTh 9:30am - 10:45am	Seats (Total: 5) ESJ 0215
0201	Michel Cukier Class time/details on ELMs	Seats (Total: 10) ONLINE

RE01	Michel Cukier Contact instructor or department for details.	Seats (Total: 5)

ENRE689E **Special Topics in Engineering Materials; Operations Research Models in Engineering**

Credits: 3 Grading Method: Regular, Audit

Jointly offered with ENME741. Credit only granted for: ENME738, ENME741, ENRE808E, ENCE603. Formerly: ENME738.

0101	Steven Gabriel M 4:00pm - 5:00pm W 9:30am - 11:00am	Seats (Total: 15) ONLINE ONLINE
0201	Steven Gabriel Class time/details on ELMs	Seats (Total: 10) ONLINE
RE01	Steven Gabriel Class time/details on ELMs	Seats (Total: 10) ONLINE

ENRE799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENRE898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENRE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENSE Systems Engineering Fall 2020

ENSE621 **Systems Engineering Concepts and Processes: A Model-Based Approach**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Institute for Systems Research. Credit only granted for: ENPM641 or ENSE621.

An INCOSE-oriented introduction to model-based systems engineering. Provides an overview of systems engineering concepts, processes and methods, with a particular focus on: the development of stakeholder and system requirements; characteristics of well-written requirements; the use of SysML software tools to develop of system- and element-level architectures; and the relationship between requirements and architecture. Architecture-related topics include specification and visualization of system attributes, behavior, and interfaces. Other topics include acquisition and development life cycle models; operational concepts and use cases; requirements and design traceability; analysis, modeling and simulation; systems engineering management; risk management; configuration management; systems-of-systems; and system complexity. The course includes a class project in which teams of 3-5 students use SysML to develop stakeholder requirements, system requirements, and a logical system architecture for an engineered system of interest to them and then perform a design trade-off analysis for some aspect of the system.

0201	Timothy Eveleigh	Seats (Total: 22)
	Tu 7:00pm - 9:40pm	ONLINE

ENSE623 **System Development, Verification, and Validation**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Institute for Systems Research; and ENSE622. Credit only granted for: ENPM643 or ENSE623.

This course completes the ENSE621, ENSE622 sequence. It covers system simulation development and a variety of verification and validation topics. It addresses development testing and operational testing; test methodologies; the planning of test programs and Test and Evaluation Master Plans (TEMPs); the planning and execution of tests; and the writing of test plans and test reports. Topics include verification methods; specification-based testing; test verification matrices; model-based verification; model checking and other formal approaches to verification; design of experiments; performance testing; reliability testing; usability/human factors testing; and other types of testing. The course includes a class project in which teams of 3-5 students: develop requirements for a simulation that supports a system analysis of interest (the user need); develop the simulation (in MATLAB); verify that it meets its requirements; and validate that it may be used to support the analysis of interest.

0101	Steven Biemer	Seats (Total: 25)
	W 7:00pm - 9:40pm	ONLINE

ENSE626 **System Life Cycle Analysis and Risk Management**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Institute for Systems Research.

This course covers topics related to estimating the costs and risks incurred through the lifetimes of projects, products and systems. In addition, treatment is given to methods that determine the drivers of costs and risks and facilitate determination of the most effective alternatives to reducing them. Also covered, are relevant analytic tools from probability and statistics and also important managerial and organizational concepts. Extensive use is made of case studies and examples from industry and government.

0101	Nidak Sumrean	Seats (Total: 16)
	M 7:00pm - 9:40pm	ONLINE

ENSE698A **Special Topics in Systems Engineering; Autonomous Systems Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: Permission of ENGR-Institute for Systems Research. Restriction: Must be a student in an engineering graduate program. Contact instructor for permission to register. Recommended: Experience with model-based systems engineering and robotic systems. Restriction: Students will use a model-based systems engineering (MBSE) process, simulation software, and supporting tools to design and simulate a multi-agent autonomous system (a team of ground robots) to meet given requirements. Students will use models to make design decisions regarding system architecture and components such as sensors, computing, and collaboration algorithms. Student teams will test their multi-agent system to verify that it meets system requirements and will compete against other teams to determine the most capable system.

0101	Jeffrey Herrmann, Donald Sofge, Craig Lawrence	Seats (Total: 26)
	Class time/details on ELMs	ONLINE

ENSE699 **Directed Study in Systems Engineering**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Directed study in Systems Engineering.

Contact department for information to register for this course.

ENSE799 **Systems Engineering Thesis; Masters Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

The application of systems engineering concepts, principles, and theories will be applied to the Master's Thesis project. Project/thesis work will be defined and selected early in student's program and supervised by a university faculty mentor.

Contact department for information to register for this course.

ENSP Environmental Science and Policy Fall 2020

ENSP101 Introduction to Environmental Science

Credits: 3 Grading Method: Regular CORE: PS General Education: DSNS

One of two required courses that introduce students to the topics studied and methods employed in environmental science and policy. Emphasis on scientific ways of knowing; the systems, cycles, flows, and interfaces that characterize the atmosphere, lithosphere, hydrosphere, and biosphere; the analysis of human impacts on these systems; and the nature of scientific uncertainty and methods of quantifying environmental processes.

0101	Annette Spivy TuTh 11:00am - 12:15pm Th 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Annette Spivy TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Annette Spivy TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0104	Annette Spivy TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0105	Annette Spivy TuTh 11:00am - 12:15pm Th 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0106	Annette Spivy TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0107	Annette Spivy TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
FC01	Annette Spivy TuTh 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 35) ONLINE	

ENSP305 **Applied Quantitative Methods in Environmental Science and Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BIOM301, ECON321, GEOG306, PSYC200, or SOCY201; and (ENSP101 and ENSP102). And MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220. Restriction: Must be in a major in AGNR-Dean-Environmental Science & Policy Program; or permission of AGNR-Dean-Environmental Science & Policy Program. Credit only granted for: ENSP305 or AREC382. Additional information: Applied topics covered in this course will supplement coursework in introductory statistics and mathematics; this course is not intended for students with significant previous advanced data analysis or statistical experience.

Intended for students interested in pursuing career or graduate research opportunities that will include management of environmental databases, detailed analysis of environmental data, and/or application of predictive environmental models. Students will learn necessary skills to manage and analyze environmental data through hands-on training in commonly used software and a series of topical case studies. Data analysis and data management will be taught using publicly available real-world environmental data sets.

0101	Annette Spivy	Seats (Total: 23)
	TuTh 5:00pm - 6:15pm	ONLINE

ENSP330 **Introduction to Environmental Law**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: ENSP101 and ENSP102. Restriction: Junior standing or higher. And must be a major in the Environmental Science and Policy program; or permission of Environmental Science and Policy program.

An overview of environmental law, from its common law roots to its role in the modern regulatory state, including an examination of major federal environment statutes and the policy debates inherent in them. Other areas covered include civil and criminal enforcement, standing to sue, land use control, and regulatory takings.

0101	Joanna Goger	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ESJ 1202
	Class time/details on ELMs	ONLINE

ENSP340 **Water: Science, Ethics, and Policy**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: ENSP101 and ENSP102. Restriction: Must have earned a minimum of 60 credits. And must be a major in the Environmental Science and Policy program; or permission of Environmental Science and Policy program.

Exploration of the science, policy, and ethical aspects of water resource protection and management. Focus on water pollution, water availability, ecosystems, and sustainability

0101	Caroline Boules TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 25) ESJ 1215 ONLINE

ENSP386 **Internship**

(Perm req)

Credits: 3-6 Grading Method: Regular

Restriction: Must have internship proposal approved by the concentration advisor, the director of ENSP and the student's internship sponsor.

Contact department for information to register for this course.

ENSP399 **Special Topics in Environmental Science and Policy**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

A substantive and specialized examination of contemporary issues in environmental science or policy.

Contact department for information to register for this course.

ENSP399R **Special Topics in Environmental Science and Policy; Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

A substantive and specialized examination of contemporary issues in environmental science or policy.

0601	Annette Spivy Contact instructor or department for details.	Seats (Total: 10)
1001	Jennifer Mullinax Contact instructor or department for details.	Seats (Total: 10)

ENSP400 **Capstone in Environmental Science and Policy**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

Prerequisite: ENSP101; and ENSP102. Restriction: Must be in Environmental Science and Policy program; and senior standing; and permission of the Environmental Science and Policy Program.

Integration of physical, biological, and social sciences with applications to environmental science and policy. Problem-solving and multi-disciplinary case study evaluations pertinent to contemporary and future issues related to the environment.

0101	Mark Carroll TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 35) PHY 1412 ONLINE
0102	Joanna Goger TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 35) EGR 1202 ONLINE

ENSP499 **Honors Thesis Research**

Credits: 1-6 Grading Method: Regular

Individual research, thesis, and oral defense. The research project will be conducted under the supervision of a faculty member.

Contact department for information to register for this course.

ENST Environmental Science and Technology Fall 2020

ENST200 **Fundamentals of Soil Science**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: LL General Education: DSNL

Corequisite: CHEM131 and CHEM132; or permission of AGNR-Environmental Science & Technology department. Credit only granted for: ENST200 or NRSC200. Formerly: NRSC200.

Study and management of soils as natural bodies, media for plant growth, and ecosystem components. Morphology, composition, formation, and conservation of soils. Chemical, biological, and physical properties are discussed in relation to the production of plants, the functioning of hydrologic and nutrient cycles, the protection of environmental quality, and engineering uses of soils.

Blended course with online synchronous lecture activities and hands-on lab activities that are partly online/at-home exercises and partly face-to-face field exercises. There will be two in-person on-campus field trips during September. The hands-on lab exercises will be self-conducted at home, using mainly common household items, but there will be approximately $100 / student cost for specialized lab experiment supplies, many of which will be useful to students in the future.

0101	Raymond Weil TuTh 3:30pm - 4:45pm Tu 5:00pm - 7:50pm Contact instructor or department for details.	Seats (Total: 20) ONLINE ONLINE	 Lab

0102	Raymond Weil TuTh 3:30pm - 4:45pm W 5:00pm - 7:50pm Contact instructor or department for details.	Seats (Total: 20) ONLINE ONLINE	 Lab
0103	Raymond Weil TuTh 3:30pm - 4:45pm Th 5:00pm - 7:50pm Contact instructor or department for details.	Seats (Total: 20) ONLINE ONLINE	 Lab
0104	Raymond Weil TuTh 3:30pm - 4:45pm Tu 9:30am - 12:20pm Contact instructor or department for details.	Seats (Total: 20) ONLINE ONLINE	 Lab

ENST233 **Introduction to Environmental Health**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS

Examines how humans are affected by the quality of our air, water, soil and food supply as well as how human activities alter these survival necessities. Students will learn how the evolution and prosperity of human populations have resulted in degradation of our environment and the impact of environmental degradation on the health of people. The implications of individual and collective choices for sustainable food production, population management, and resource utilization will be explored.

0101	Lance Yonkos TuTh 9:30am - 10:45am M 3:00pm - 3:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Lance Yonkos TuTh 9:30am - 10:45am W 3:00pm - 3:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Lance Yonkos TuTh 9:30am - 10:45am M 4:00pm - 4:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0104	Lance Yonkos TuTh 9:30am - 10:45am W 4:00pm - 4:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

ENST281 **Computer Aided Design in Ecology**

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Environmental Sci & Tech program.

Basics of Computer Aided Drawing (CAD) applied to design of constructed ecosystems. Use of campus stormwater wetland as case study.

0101	Jose-Luis Izursa	Seats (Total: 20)	
	M 2:00pm - 2:50pm	ONLINE	
	M 3:00pm - 5:00pm	ONLINE	Lab
0102	Jose-Luis Izursa	Seats (Total: 20)	
	M 2:00pm - 2:50pm	ONLINE	
	W 3:00pm - 5:00pm	ONLINE	Lab

ENST282 **Ecological Innovation and Entrepreneurship**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: ENST282 or ENST499K. Formerly: ENST499K.

Ecotechnology innovation is taught with design thinking, which uses an iterative cycle of developing customer empathy, learning ecological technology, appreciating environmental stewardship, brainstorming, rapid prototyping, user experience, testing and redesign. Environment entrepreneurship is based on the Lean Startup process, which uses customer discovery, encourages quick product development, reduces start-up costs, tests ideas quickly, and employs designed experiments. A multidisciplinary academic setting embraces designing, building, testing and marketing novel technologies that enhance the environmental needs of humans. Students will learn in an active environment that requires working creatively, collaboratively, diligently, and precisely to create a business model and tangible prototype for a new commercial product.

Blended course with online synchronous lecture. There will be four in-person on-campus hands-on activities during the semester. Dates TBD.

0101	David Tilley	Seats (Total: 20)
	MWF 10:00am - 10:50am	ONLINE
	Contact instructor or department for details.	

ENST301 **Field Soil Morphology I**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of AGNR-Environmental Science & Technology department. Formerly: ENST308.

This is a field-oriented course that introduces students to the techniques used to (1) describe soil morphology, and site and profile characteristics, (2) make land use interpretations based on soil characteristics, and (3) classify soils. This class is designed to prepare students for the Regional Collegiate Soil Judging Contest and for students to gain experience in the description and interpretation of soils in the field.

0101	Martin Rabenhorst	Seats (Total: 7)
	Contact instructor or department for details.	

ENST302 **Field Soil Morphology II**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST301. Restriction: Permission of AGNR-Environmental Science & Technology department. Formerly: ENST308.

This is the second field-oriented course in a three course sequence that provides intermediate training for students in the techniques used to (1) describe soil morphology, and site and profile characteristics, (2) make land use interpretations based on soil characteristics, and (3) classify soils. This class is designed to prepare students for the Regional Collegiate Soil Judging Contest and for students to gain experience in the description and interpretation of soils in the field.

0101	Martin Rabenhorst	Seats (Total: 7)
	Contact instructor or department for details.	

ENST303 **Field Soil Morphology III**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST302. Restriction: Permission of AGNR-Environmental Science & Technology department. Formerly: ENST308.

This is the third field-oriented course in a three course sequence that provides intermediate training for students in the techniques used to (1) describe soil morphology, and site and profile characteristics, (2) make land use interpretations based on soil characteristics, and (3) classify soils. This class is designed to prepare students for the Regional Collegiate Soil Judging Contest and for students to gain experience in the description and interpretation of soils in the field.

0101	Martin Rabenhorst	Seats (Total: 15)
	Contact instructor or department for details.	

ENST333 **Ecosystem Health and Protection**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST233. Restriction: Must be in one of the following programs (Environmental Sci & Tech: Ecological Tech Design; Environmental Sci & Tech: Environmental Health; Environmental Sci & Tech: Soil & Watershed Science; Environmental Sci & Tech: Natural Resources Mgmt; Environmental Sci & Tech). Credit only granted for: ENST499A or ENST333. Formerly: ENST499A.

Discussion of the philosophies, principles, and practices for assessing ecosystem health with emphasis on an ecosystem perspective rather than a human health perspective. Degradation associated with human activities will be emphasized. Topics will range from local to regional to global issues, including a discussion on global warming and its possible impacts on ecosystems. Concepts will be clarified using case histories from the Chesapeake Bay watershed.

0101	Jennifer Gunnulfsen	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	ONLINE

ENST360 **Ecosystem Ecology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106. Restriction: Must be in one of the following programs (Environmental Sci & Tech: Ecological Tech Design; Environmental Sci & Tech: Environmental Health; Environmental Sci & Tech: Soil & Watershed Science; Environmental Sci & Tech: Natural Resources Mgmt; Environmental Sci & Tech).

The study of ecology has a long and interesting history, from early society's efforts to understand and alter their environment as a matter of survival to the challenges the modern world is facing that are global in scale. Through the course text, distributed supplemental chapter readings and an understanding of the scientific literature, this course will cover the essential concepts and principles of ecosystem ecology as well as its history and past and present controversies. Several of the basic methods and tools of field research and the applied management of ecosystems will be discussed and demonstrated with several field excursions in the natural environs of the DC area. Central to this course will be the understanding that modern human society is an integral part of nature, with the power to impact and influence elements of the natural world at multiple scales. An analysis of policy implications for the biosphere will be discussed.

The study of ecology has a long and interesting history, from early society's efforts to understand and alter their environment as a matter of survival to the challenges the modern world is facing that are global in scale. Through the course text, distributed supplemental chapter readings and an understanding of the scientific literature, this course will cover the essential concepts and principles of ecosystem ecology as well as its history and past and present controversies. Several of the basic methods and tools of field research and the applied management of ecosystems will be discussed and demonstrated with several field excursions in the natural environs of the DC area. Central to this course will be the understanding that modern human society is an integral part of nature, with the power to impact and influence elements of the natural world at multiple scales. An analysis of policy implications for the biosphere will be discussed.

0101	Mitchell Pavao-Zuckerman MWF 10:00am - 10:50am M 1:00pm - 1:50pm	Seats (Total: 35) ONLINE ONLINE	 Discussion
0102	Mitchell Pavao-Zuckerman MWF 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 35) ONLINE ONLINE	 Discussion

ENST373 **Natural History of the Chesapeake Bay**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with BSCI373. Credit only granted for: BSCI373 or ENST373.

Consideration of the major groups of organisms associated with the Chesapeake Bay and current issues that determine humans' present and future uses for the Chesapeake and its biota.

0101	Patrick Kangas Class time/details on ELMs	Seats (Total: 80) ONLINE

ENST388 **Honors Thesis Research**

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

1803	Paul Leisnham Contact instructor or department for details.	Seats (Total: 1)
2201	Martin Rabenhorst Contact instructor or department for details.	Seats (Total: 1)
2905	Stephanie Yarwood Contact instructor or department for details.	Seats (Total: 1)

ENST389 **Internship**

(Perm req)

Credits: 3 Grading Method: Sat-Fail

Credit will be granted for practical work carried out by students placed in work environment related to their stated career goals. Students must do an in-depth study in some portion of the work experience and produce a special project or report related to this study. A student work log is also recommended. An evaluation from the external supervisor of the project will be required. Credit arranged with supervising faculty member.

0101	Jose-Luis Izursa	Seats (Total: 50)
	Contact instructor or department for details.	

ENST403 **Invasive Species Ecology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ENST403, ENST603, or ENST689R.

We will examine ecological, evolutionary, and anthropogenic processes facilitating or resisting biological invasions, and consider their environmental, economic, and human health impacts. We will consider various management strategies to mitigate invasions and identify areas of future research. Field trips and detailed discussion of recent findings and controversies in the literature will help illustrate fundamental concepts of invasions among various ecosystems.

0101	Paul Leisnham	Seats (Total: 20)
	MWF 10:00am - 10:50am	ONLINE

ENST411 **Principles of Soil Fertility**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST200; or students who have taken courses with comparable content may contact the department. Jointly offered with ENS T611. Credit only granted for: ENST411 or NRSC411. Formerly: NRS C411.

Soil factors affecting plant growth and quality with emphasis on the bio-availability of mineral nutrients. The management of soil systems to enhance plant growth by means of crop rotations, microbial activities, and use of organic and inorganic amendments.

0101	Raymond Weil	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

ENST414 **Soil Morphology, Genesis and Classification**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST200. Credit only granted for: ENST414 or NRSC414. Formerly: NRSC414.

Processes and factors of soil genesis. Taxonomy of soils of the world by U.S. System. Soil morphological characteristics, composition, classification, survey and field trips to examine and describe soils.

0101	Brian Needelman	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	M 5:00pm - 5:50pm	HJP 0226	
	Class time/details on ELMs	ONLINE	Lab

ENST415 **Renewable Energy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, PHYS121, and MATH113; or permission of AGNR-Environmental Science & Technology department. Restriction: Must be in a major within AGNR-Environmental Science & Technology department.

An overview of renewable energy technologies and their current applications. Emphasis will be placed on technological readiness, efficiency and sustainability of renewable energy alternatives. Technologies include solar thermal, photovoltaics, biodiesel, ethanol, anaerobic digestion, wind, hydroelectric, and microbial fuel cells.

0101	Stephanie Lansing	Seats (Total: 40)
	MWF 11:00am - 11:50am	ONLINE

ENST417 **Soil Hydrology and Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST200; and (MATH113 or MATH115). Or permission of instructor. Credit only granted for: ENST417 or NRSC417. Formerly: NRSC417.

A study of soil water interactions: the hydrologic cycle; the unique properties of water and soil; the soil components and their interactions; the field water cycle; transport processes involving water, heat and solutes; human effects on soil and groundwater; as well as the measurement, prediction, and control of the physical processes taking place in and through the soil.

0101	Robert Hill	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ONLINE

ENST432 **Environmental Microbiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131 and CHEM132. And BSCI170 and BSCI171; or BSCI105. Credit only granted for: ENST432 or ENST499M. Formerly: ENST499M.

Microorganisms are everywhere and mediate many of the processes that we observe everyday. These organisms are the unseen catalysts for numerous industrial processes and are critical to many emerging technologies and novel products. Environmental microbiologists ask: How do microorganisms in the environment benefit society? This course will answer this question by examining microbes in bioremediation, food safety, climate change, and biotechnology.

0101	Stephanie Yarwood	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

ENST441 Sustainable Agriculture

Credits: 3 Grading Method: Regular

Credit only granted for: ENST441 or NRSC441. Formerly: NRSC441.

Environmental, social and economic needs for alternatives to the conventional, high-input farming systems which currently predominate in industrial countries. Strategies and practices that minimize the use of non-renewable resources.

0101	Raymond Weil	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ONLINE

ENST450 Wetland Ecology

Credits: 3 Grading Method: Regular

Prerequisite: BIOM301; or permission of AGNR-Environmental Science & Technology department. Jointly offered with ENST650. Credit only grant ed for: ENST450 or MEES650.

Plant and animal communities, biogeochemistry, and ecosystem properties of wetlands. Lectures are supplemented by weekend or Friday field trips (1-3 days total during the semester) and in-class labs that emphasize collection and analysis of field data on wetland vegetation, soil, and hydrology. Wading boots (at least hip length) are strongly recommended.

0101	Andrew Baldwin	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

ENST456 Spatial Analysis and Ecological Sampling

Credits: 3 Grading Method: Regular

Recommended: GEOG306 and GEOG373. Restriction: Senior standing or higher; and permission of instructor. Credit only granted for: ENST456 or ENST499T. Formerly: ENST499T. Additional information: Students will need to provide an 8GB (or larger) thumb drive for data storage.

This course will teach ENST students ecological sampling methods and applied spatial analysis skills. Students will work in small groups on research projects they develop and test during the semester. Students will develop a research hypothesis based on spatial variation, test their hypothesis, display it visually in ArcGIS, and analyze it with appropriate statistical methods in R culminating in a final paper.

0101	Shannon Browne	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ENST460 **Principles of Wildlife Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed two semesters of biology laboratory; and (ENST360; or BSCI361). Or permission of AGNR-Environmental Science & Technology department.

Ecological principles and requirements of wildlife as basis for management, and introduction to the scientific literature. Conflicts in wildlife management, government administration of wildlife resources, legislation, and history of the wildlife management profession.

0101	Jennifer Mullinax	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

ENST472 **Capstone II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS General Education: DSSP

Prerequisite: ENST471. Restriction: Must be in a major within AGNR-Environmental Science & Technology department; and permission of AGNR-Environmental Science & Technology department.

This course is the second in a two-part series. Students will continue work on projects proposed and begun in ENST471. Focus on professional project preparation, presentation, critical evaluation on environmental science research, professional development, and career planning. Students will develop and present original projects and critique projects presented by others.

1201	Andrew Baldwin	Seats (Total: 10)
	Contact instructor or department for details.	
1205	William Bowerman	Seats (Total: 10)
	Contact instructor or department for details.	

1401	Frank Coale Contact instructor or department for details.	Seats (Total: 5)
1501	Gary Felton Contact instructor or department for details.	Seats (Total: 10)
1508	Reginal Harrell Contact instructor or department for details.	Seats (Total: 10)
1601	Robert Hill Contact instructor or department for details.	Seats (Total: 10)
1801	Patrick Kangas Contact instructor or department for details.	Seats (Total: 10)
1802	Stephanie Lansing Contact instructor or department for details.	Seats (Total: 10)
1803	Paul Leisnham Contact instructor or department for details.	Seats (Total: 10)
2005	Jennifer Mullinax Contact instructor or department for details.	Seats (Total: 10)
2101	Brian Needelman Contact instructor or department for details.	Seats (Total: 10)
2102	Masoud Negahban-Azar Contact instructor or department for details.	Seats (Total: 10)
2103	Mitchell Pavao-Zuckerman Contact instructor or department for details.	Seats (Total: 10)
2104	Shannon Browne Contact instructor or department for details.	Seats (Total: 10)
2105	Wendy Peer Contact instructor or department for details.	Seats (Total: 10)
2201	Martin Rabenhorst Contact instructor or department for details.	Seats (Total: 10)
2601	David Tilley Contact instructor or department for details.	Seats (Total: 10)

2701	Raymond Weil Contact instructor or department for details.	Seats (Total: 10)
2804	Jose-Luis Izursa Contact instructor or department for details.	Seats (Total: 10)
2805	Gurpal Toor Contact instructor or department for details.	Seats (Total: 10)
2905	Stephanie Yarwood Contact instructor or department for details.	Seats (Total: 10)
3001	Lance Yonkos Contact instructor or department for details.	Seats (Total: 10)
3202	Candice Duncan Contact instructor or department for details.	Seats (Total: 5)

ENST485 **Water Management in Urban Environment**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH120, MATH130, MATH136, or MATH140. Credit only granted for: ENST485 OR ENST489Z. Formerly: ENST489Z.

Historically, with the exception of certain locations, water has been available in sufficient quantities, and providing supporting infrastructure has been relatively straightforward. In urban areas, the concentration of people and the drastic changes in land use, have altered the fluxes of water, sediments, chemicals, and microorganisms. As the population increases and the number of large urban areas keeps growing (both in U.S. and internationally), managing water in urban areas is becoming more challenging. Water must be supplied for domestic, commercial, and industrial use, as well as irrigation and maintaining and enhancing local environments (e.g., urban streams). In addition, stormwater must be managed to prevent flooding and environmental damage, and used water, which contains organic matter, nutrients, and other constituents that can be extracted and reused, must be collected and managed. In this course we take a systems approach to urban water hydrology, engineering, planning and management. We will explore urban water cycle, urban runoff and drainage characteristics, urban water supply and demand, stormwater collection and treatment and designing best management practices. Additionally, we look at the climate impacts on the urban water cycle.

0101	Masoud Negahban-Azar TuTh 12:30pm - 1:45pm	Seats (Total: 40) ONLINE

ENST486 **SENIOR PROFESSIONAL INTERNSHIP**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENST389. Restriction: Must be in the Environmental Science and Technology program; and permission of AGNR-Environmental Science & Technology department. Additional information: The course has two types of activities: lecture and experiential learning. Students are supposed to work on their internship for 90 hours and participate in a 2-hour lecture every other week, during the semester.

Students will arrange an off-campus internship experience related to Environmental Science and Technology to develop expertise in a specific area of their ENST concentration curriculum. Classroom sessions will frame student experiences within the broader discipline of Environmental Science and Technology.

The course has two types of activities: lecture and experiential learning. Students are supposed to work on their internship for 90 hours and participate in a 2-hour lecture every other week, during the semester.

0101	Jose-Luis Izursa	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

ENST487 **Environmental Conflicts and Decision Making**

Credits: 2 Grading Method: Regular

Restriction: Senior standing. And must be in one of the following programs (Environmental Sci & Tech: Natural Resources Mgmt; Environmental Sci&Pol-Wildlife Ecology & Mgmt) ; or permission of AGNR-Environmental Science & Technology department.

Study major cases which focus on environmental science with concentration on the role and techniques of negotiation, collaborative decision making, and adaptive resource management as an environmental conflict resolution process.

0101	Jennifer Mullinax	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ENST489 **Research Experience**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An advanced research-based course in the field of environmental science and technology.

Contact department for information to register for this course.

ENST499 **Special Topics in Environmental Science and Technology**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organized to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

Contact department for information to register for this course.

ENST499W **Special Topics in Environmental Science and Technology; Special Topics - Endangered Species Law and Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organized to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

0101	Shannon Browne	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

ENST499X **Special Topics in Environmental Science and Technology; Soil Science**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organized to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

Contact department for information to regsiter for this course.

0101	Raymond Weil	Seats (Total: 5)
	Contact instructor or department for details.	

ENST499Y **Special Topics in Environmental Science and Technology; College Teaching**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organized to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

0101	Raymond Weil	Seats (Total: 2)
	Contact instructor or department for details.	
1508	Reginal Harrell	Seats (Total: 2)
	Contact instructor or department for details.	

2104	Shannon Browne Contact instructor or department for details.	Seats (Total: 2)
2804	Jose-Luis Izursa Contact instructor or department for details.	Seats (Total: 2)
3201	Peter May Contact instructor or department for details.	Seats (Total: 2)

ENST602 **Research Principles and Methodology in Environmental Scienceand Technolgy**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Environmental Sci & Tech program.

Fundamental research strategies and methods of investigation in Environmental Science and Technology including field and laboratory procedures.

0101	Jennifer Mullinax Class time/details on ELMs	Seats (Total: 15) ONLINE

ENST603 **Advanced Invasive Species Ecology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Jointly offered with ENST403. Credit only granted for: ENST403, ENST603 , or ENST689R. Formerly: ENST689R. Additional information: Two field trips are planned for this class.

We will examine ecological, evolutionary, and anthropogenic processes facilitating or resisting biological invasions, and consider their environmental, economic, and human health impacts. We will consider various management strategies to mitigate invasions and identify areas of future research. Field trips and detailed discussion of recent findings and controversies in the literature will help illustrate fundamental concepts of invasions among various ecosystems.

0101	Paul Leisnham MWF 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 10) ONLINE ONLINE	 Discussion

ENST608 **Research Methods**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Development of research viewpoint by detailed study and report on crop and soil research of the Maryland Agriculture Experiment Station or review and discussion of literature on specific agricultural problems or new research techniques.

Contact department for information to register for this course.

ENST611 **Advanced Principles of Soil Fertility**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENST200; or students who have taken courses with comparable content may contact the department. Jointly offered with ENS T411. Credit only granted for: ENST411, NRSC411, or ENST611.

Soil factors affecting plant growth and quality with emphasis on the bio-availability of mineral nutrients. The management of soil systems to enhance plant growth by means of crop rotations, microbial activities, and use of organic and inorganic amendments.

0101	Raymond Weil	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	ONLINE

ENST650 **Advanced Wetland Ecology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BIOM301; or permission of AGNR-Environmental Science & Technology department; or permission of CMNS-Marine & Estuarine-Environmental Science Prog. Jointly offered with ENST450, MEES650. Credit only granted for: ENST450, ENST650, or MEES650. Additional information: Wading boots (at least hip length) are stron gly recommended.

Plant and animal communities, biogeochemistry, and ecosystem properties of wetland systems. In-class laboratory will emphasize collection and analysis of field data on wetland vegetation, soil, and hydrology.

Course requires two Saturday field trips.

0101	Andrew Baldwin	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	ONLINE

ENST689 **Special Topics**

Credits: 1-3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

1201	Andrew Baldwin Contact instructor or department for details.	Seats (Total: 5)
1205	William Bowerman Contact instructor or department for details.	Seats (Total: 5)
1401	Frank Coale Contact instructor or department for details.	Seats (Total: 5)
1501	Gary Felton Contact instructor or department for details.	Seats (Total: 5)
1508	Reginal Harrell Contact instructor or department for details.	Seats (Total: 5)
1601	Robert Hill Contact instructor or department for details.	Seats (Total: 5)
1801	Patrick Kangas Contact instructor or department for details.	Seats (Total: 5)
1802	Stephanie Lansing Contact instructor or department for details.	Seats (Total: 5)
1803	Paul Leisnham Contact instructor or department for details.	Seats (Total: 5)
1805	Michael Kearney Contact instructor or department for details.	Seats (Total: 5)
2001	Bahram Momen Contact instructor or department for details.	Seats (Total: 5)
2005	Jennifer Mullinax Contact instructor or department for details.	Seats (Total: 5)
2101	Brian Needelman Contact instructor or department for details.	Seats (Total: 5)
2102	Masoud Negahban-Azar Contact instructor or department for details.	Seats (Total: 5)
2103	Mitchell Pavao-Zuckerman Contact instructor or department for details.	Seats (Total: 5)

2105	Wendy Peer Contact instructor or department for details.	Seats (Total: 5)
2201	Martin Rabenhorst Contact instructor or department for details.	Seats (Total: 3)
2601	David Tilley Contact instructor or department for details.	Seats (Total: 5)
2701	Raymond Weil Contact instructor or department for details.	Seats (Total: 5)
2805	Gurpal Toor Contact instructor or department for details.	Seats (Total: 5)
2905	Stephanie Yarwood Contact instructor or department for details.	Seats (Total: 5)
3001	Lance Yonkos Contact instructor or department for details.	Seats (Total: 2)

ENST689E **Special Topics; Advanced Ecosystem Health and Natural Resource Management**

Credits: 3 Grading Method: Regular

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Paul Leisnham TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE

ENST689X **Special Topics; Methods in University Teaching**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Raymond Weil Contact instructor or department for details.	Seats (Total: 1)

ENST689Z **Special Topics; Introductory University Instruction**

Credits: 1-3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

2905	Stephanie Yarwood	Seats (Total: 1)
	Contact instructor or department for details.	

ENST789 **Advances in Research**

Credits: 1-4 Grading Method: Regular, Audit

A study of recent advances in agronomy research.

Contact department for information to register for this course.

ENST798 **Graduate Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Designed to provide a venue for interactive discussion between ENST graduate students and other members of the ENST community regarding thesis/dissertation research planned or conducted as part of the students graduate program.

Contact the department to obtain permission to register.

0101	Stephanie Yarwood, Martin Rabenhorst	Seats (Total: 40)
	W 12:00pm - 12:50pm	ONLINE

ENST799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENST898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENTM Entomology Fall 2020

ENTM699 **Advanced Entomology**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit, Sat-Fail

Credit and prerequisites to be determined by the department. First and second semesters. Studies of minor problems in morphology, physiology, taxonomy and applied entomology, with particular reference to the preparation of the student for individual research.

Contact department for information to register for this course.

ENTM699K **Advanced Entomology; Biological Sciences Teaching and Learning in Higher Education**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Credit and prerequisites to be determined by the department. First and second semesters. Studies of minor problems in morphology, physiology, taxonomy and applied entomology, with particular reference to the preparation of the student for individual research.

Cross-listed with BIOL608K, CBMG699K, and CHEM608K. Credit will be grant edfor only one of the following: BIOL608K, CBMG699K, CHEM608K, or ENTM699K.

0101	Gili Ad-Marbach	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

ENTM701 **Effective Teaching: TA Training**

(Perm req)

Credits: 1 Grading Method: Regular

Cross-listed with BISI701. Credit only granted for: ENTM701, BISI688Z, CBMG688Z, or BIOL701.

A survey and discussion of topics pertinent to graduate students who are first-time teaching assistants, including teaching responsibilities and policies, effective techniques of lecturing and leading discussions, composing and grading quizzes and exams, cultural diversity, time management, and development of a teaching portfolio. All teaching assistants in the College of Life Sciences must take a 701 TA training course in one of the departments.

0101	Bretton Kent	Seats (Total: 20)
	Tu 6:00pm - 8:00pm	ONLINE

ENTM710 **Insect Biodiversity, Physiology and Ecology**

Credits: 3 Grading Method: Regular

A survey course discussing the various families of insects, discuss thing their anatomy and physiology, and their role in ecological systems. Students will examine the ecological and evolutionary perspectives on interactions between plants and vertebrate and invertebrate animals. Further, it explores the applied consequences of animal-plant interactions to agroecology and conservation biology. These goals are achieved by reviewing the theoretical underpinnings of animal-plant interactions, and exposing students to research literature on animal-plant interactions.

Restricted to Applied Entomology students. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PLE1	Marcia Shofner **Meets August 31, 2020 - November 20, 2020** Class time/details on ELMs	Seats (Total: 8) ONLINE

ENTM745 **Bee Biology and Beekeeping**

Credits: 3 Grading Method: Regular

Students will be introduced to the anatomy and physiology of the honey bee colony with emphasis on how to use this information to best manage honey bee colonies.

Restricted to Applied Entomology students. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PLE1	Dennis vanEngelsdorp, Anthony Nearman, Kelly Kulhanek **Meets August 31, 2020 - November 20, 2020** Class time/details on ELMs	Seats (Total: 8) ONLINE

ENTM756 **Insect Diseases and Pathology**

Credits: 3 Grading Method: Regular

Credit only granted for: ENTM715 or ENTM756. Formerly: ENTM715.

Integrates aspects of biochemistry, molecular biology and evolution theory with ecology using pathogens of insects as a model. The various biotic (living) and abiotic (nonliving) factors that can contribute to plant problems. Explores the direction and goals of innovation in microbial biocontrol as well as the effect of social criticism and considerations of environmental impact on attempts to introduce engineered microorganisms.

Restricted to Applied Entomology students. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PLE1	Raymond StLeger	Seats (Total: 8)	
	Meets August 31, 2020 - November 20, 2020		
	Class time/details on ELMs	ONLINE	

ENTM769 **Capstone: Scholarly Paper**

Credits: 3 Grading Method: Regular

An examination of the current literature on topics related to the field of applied entomology. The Capstone Course provides the opportunity to apply and integrate best practices based on current research in the form of a formal scholarly paper.

PLE1	Cerruti Hooks	Seats (Total: 8)	
	Meets August 31, 2020 - November 20, 2020		
	Class time/details on ELMs	ONLINE	
	Restricted to students in the Professional Entomology Program.		

ENTM788C **Entomological Topics; Colloquium**

Credits: 1-3 Grading Method: Regular, Audit

One lecture or one two-hour laboratory period a week for each credit hour. Lectures, group discussions or laboratory sessions on selected topics such as: aquatic insects, biological control of insects, entomological literature, forest entomology, history of entomology, insect biochemistry, insect embryology, immature insects, insect behavior, insect communication, principles of entomological research.

0101	Rafael Barreto de Andrade	Seats (Total: 45)	
	F 12:00pm - 12:50pm	ONLINE	
	F 1:00pm - 1:50pm	ONLINE	Discussion

ENTM798D **Topic Seminar; Arthropod Pests of Agricultural Crops**

Credits: 1 Grading Method: Regular, Audit

Discussion and presentation of current research and literature.

0101	Galen Dively	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

ENTM798V **Topic Seminar; Introduction to R**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Discussion and presentation of current research and literature.

0101	Maile Neel, Daniel Gruner	Seats (Total: 20)
	Tu 2:00pm - 2:50pm	ONLINE

ENTM799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENTM898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENTM899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENTS Telecommunications Fall 2020

ENTS622 **Introduction to Digital Communication Systems**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Telecommunications (Master's) program; or permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: ENTS622 or ENTS689B. Formerly: ENTS689B.

Principles of analog and digital communication systems design. Analysis of the performance and relative merits of different modulation and demodulation, signal processing, filtering and error control schemes in communication systems. Also provides an understanding of the design of modern digital communication systems.

0101	Alejandra Mercado M 5:30pm - 8:15pm F 5:30pm - 8:15pm	Seats (Total: 8) ONLINE ONLINE	 Lab
0102	Alejandra Mercado M 5:30pm - 8:15pm Tu 9:00am - 11:45am	Seats (Total: 8) ONLINE ONLINE	 Lab
0103	Alejandra Mercado M 5:30pm - 8:15pm F 9:00am - 11:45am	Seats (Total: 8) ONLINE ONLINE	 Lab

ENTS625 **Management and Organizational Behavior in the Telecommunications Industry**

Credits: 3 Grading Method: Regular, Audit

Roles of the general manager in: determining target markets and designing strategies for them; formulating and implementing corporate and business level strategies; and staffing, developing, and managing human resources and coordinating them with the organization's financial and physical resources. Also emphasizes the building of interpersonal skills with respect to the selection of members for work teams and team formation, leadership of teams toward the achievement of strategic goals and total quality, the development and motivation of team members, and the evaluation of team and individual performance.

Restricted to ENTS majors. All non-major students will need to obtain department permission.

0101	Clarence Wesley M 2:00pm - 4:45pm	Seats (Total: 40) ONLINE	

ENTS630 **The Economics of International Telecommunications**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Telecommunications (Master's) program.

Basic microeconomic principles used by telecommunications firms, including supply and demand, elasticity, costs, productivity, pricing, market structure and competitive implications of alternative market structures. Market failures and government intervention. Public policy processes affecting business operations.

Restricted to ENTS majors. All non-major students will need to obtain department permission.

0101	Charles Olson	Seats (Total: 40)
	W 2:00pm - 4:45pm	ONLINE

ENTS632 **Telecommunications Marketing Management**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Telecommunications (Master's) program.

Topics covered include strategic marketing, sales and customer service challenges confronting organizations in the computer, communications and media industries. The course also addresses volatile technology, regulatory and competitive environments as a backdrop to strategic planning and management in the marketing domain.

Restricted to ENTS majors. All non-major students will need to obtain department permission. Click here for more course information.

0101	Henry Boyd	Seats (Total: 40)
	W 5:30pm - 8:15pm	ONLINE

ENTS635 **Decision Support Methods for Telecommunication Managers**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Telecommunications (Master's) program.

The aim of this course is to introduce management science techniques for informed decision making. Topics covered can include data analysis and regression, optimization models and applications (workforce scheduling, manufacturing, network design, facility location), sensitivity analysis, decision trees, risk analysis and business simulation models. Emphasis will be on telecommunications managerial problems, model development and the use of software packages for decision support.

Restricted to ENTS majors. All non-major students will need to obtain department permission. Click here for more course information.

0101	Kazim Ruhi	Seats (Total: 40)
	M 5:30pm - 8:15pm	ONLINE

ENTS640 **Networks and Protocols I**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Telecommunications (Master's) program.

An overview of design issues and the important industry standards for digital communications networks. This includes protocols, data communications technologies, error correction and detection, congestion control, traffic routing, Local Area Network (LAN) protocols, TCP/IP, and some security issues.

0101	Zoltan Safar Th 5:30pm - 8:15pm W 5:30pm - 8:15pm	Seats (Total: 16) ONLINE ONLINE	 Lab
0102	Zoltan Safar Th 5:30pm - 8:15pm W 8:00am - 10:45am	Seats (Total: 16) ONLINE ONLINE	 Lab

ENTS656 **Introduction to Cellular Communication Networks**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Concepts and techniques involved in wireless digital communications with emphasis on cellular and PCS systems. Properties of Mobile radio channels; intersymbol interference, multipath, and fading effects; interleaving and diversity; multiple access schemes (TDMA, FDMA, CDMA); interuser interference, traffic issues, and cell capacity; power control strategies; frequency reuse and channel assignment; handoff, paging, and location update; cell layout; introduction to cellular and PCS standards.

Click here for more course information.

0101	Michael Dellomo Tu 5:30pm - 8:15pm F 5:30pm - 8:15pm	Seats (Total: 16) ONLINE ONLINE	 Lab
0102	Michael Dellomo Tu 5:30pm - 8:15pm Th 8:00am - 10:45am	Seats (Total: 16) ONLINE ONLINE	 Lab

ENTS669B **Special Topics in Computing; Distributed Systems in a Virtual Environment**

Credits: 3 Grading Method: Regular, Audit

Selected topics of current importance in computing.

0101	Jeffrey McKinney M 5:30pm - 8:15pm	Seats (Total: 18) ONLINE	

ENTS669G **Special Topics in Computing; Data Mining with Numerical Python**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Selected topics of current importance in computing.

0101	Michael Dellomo Th 2:00pm - 4:45pm	Seats (Total: 30) ONLINE

ENTS689A **Special Topics in Telecommunications; Algorithms and Data Structures**

Credits: 3 Grading Method: Regular, Audit

Selected topics of current importance in telecommunications.

0101	Gang Qu W 2:00pm - 4:45pm	Seats (Total: 30) ONLINE

ENTS699 **Independent Study in Telecommunications; Independent Study in Telecommunications**

(Perm req)

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Individual instruction course. See ENTS program office for section number.

Prerequisite: Permission of ENTS program only.

0101	Michael Dellomo Class time/details on ELMs	Seats (Total: 1) ONLINE

ENTS699B **Independent Study in Telecommunications; Embedded Signal Processing**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Individual instruction course. See ENTS program office for section number.

By Permission of ENTS Program Only.

0101	Shuvra Bhattacharyya Contact instructor or department for details.	Seats (Total: 3)

ENTS749B **Advanced Topics in Networking; Software-Defined Networking**

Credits: 3 Grading Method: Regular, Audit

Selected advanced topics in networking.

Please click here for further course information.

0101	Majid Raissi-Dehkordi F 5:30pm - 8:15pm	Seats (Total: 24) ONLINE

ENTS759D **Advanced Topics in Communications; Distributed Antenna Systems (DAS) and Small Cells**

Credits: 3 Grading Method: Regular, Audit

Selected advanced topics in communications.

Prerequisites: ENTS656 or ENTS653.

0101	Rikin Thakker F 5:30pm - 8:15pm	Seats (Total: 30) ONLINE

ENTS759F **Advanced Topics in Communications; 5G Radio Access Networks and Technologies**

Credits: 3 Grading Method: Regular

Selected advanced topics in communications.

0101	Kamran Etemad M 1:00pm - 3:45pm	Seats (Total: 24) ONLINE

EPIB Epidemiology and Biostatistics Fall 2020

EPIB300 **Biostatistics for Public Health Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132. Restriction: Must be in Public Health Science program; and must have earned a minimum of 60 credits. Credit only granted for: EPIB300, EPIB315 or HLTH300.

An examination of biostatistical concepts and procedures as they relate to contemporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

PHSC students who declared their major BEFORE the spring 2018 semester are required to take EPIB300 before EPIB301. PHSC students who declared their major DURING the spring 2018 semester and later, are required to take EPIB301 before EPIB315.

0101	Rodman Turpin TuTh 11:00am - 11:50am M 8:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Rodman Turpin TuTh 11:00am - 11:50am M 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Rodman Turpin TuTh 11:00am - 11:50am M 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Rodman Turpin TuTh 11:00am - 11:50am M 2:00pm - 3:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0105	Rodman Turpin TuTh 11:00am - 11:50am F 8:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	Rodman Turpin TuTh 11:00am - 11:50am F 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

EPIB301 **Epidemiology for Public Health Practice**

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Must be in Public Health Science program; or must be in Community Health program. And must have earned a minimum of 45 credits. Cross-listed with HLTH301. Credit only granted for: EPIB301 or HLTH301.

An examination of the discipline of epidemiology and its application to public health issues and practices, covering current epidemiological concepts and methods.

As agreed to during the change of major workshop or orientation to PHSC: PHSC students who declared their major BEFORE the spring 2018 semester are required to take EPIB300 before EPIB301. PHSC students who declared their major DURING the spring 2018 semester and later, are required to take EPIB301 before EPIB315.

0101	Natalie Slopen	Seats (Total: 23)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	M 9:00am - 9:50am	ONLINE	Discussion
	Restricted to Public Health Science majors at College Park.		
0102	Natalie Slopen	Seats (Total: 23)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	M 10:00am - 10:50am	ONLINE	Discussion
	Restricted to Public Health Science majors at College Park.		
0103	Natalie Slopen	Seats (Total: 23)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	M 11:00am - 11:50am	ONLINE	Discussion
	Restricted to Public Health Science majors at College Park.		
0104	Natalie Slopen	Seats (Total: 23)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	M 12:00pm - 12:50pm	ONLINE	Discussion
	Restricted to Public Health Science majors at College Park.		
0105	Natalie Slopen	Seats (Total: 23)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	M 1:00pm - 1:50pm	ONLINE	Discussion
	Restricted to Public Health Science majors at College Park.		
0106	Natalie Slopen	Seats (Total: 23)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	M 2:00pm - 2:50pm	ONLINE	Discussion
	Restricted to Public Health Science majors at College Park.		
0107	Natalie Slopen	Seats (Total: 23)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	M 3:00pm - 3:50pm	ONLINE	Discussion
	Restricted to Public Health Science majors at College Park.		
0108	Natalie Slopen	Seats (Total: 23)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	M 4:00pm - 4:50pm	ONLINE	Discussion
	Restricted to Public Health Science majors at College Park.		

0109	Natalie Slopen TuTh 3:30pm - 4:20pm M 8:00am - 8:50am	Seats (Total: 23) ONLINE ONLINE	 Discussion
0201	Natalie Slopen TuTh 3:30pm - 4:20pm M 9:00am - 9:50am *Restricted to College Park students in the Behavioral and Community Health major or the Public Health Science major.*	Seats (Total: 20) ONLINE ONLINE	 Discussion
0202	Natalie Slopen TuTh 3:30pm - 4:20pm W 1:00pm - 1:50pm *Restricted to College Park students in the Behavioral and Community Health major or the Public Health Science major.*	Seats (Total: 20) ONLINE ONLINE	 Discussion
0203	Natalie Slopen TuTh 3:30pm - 4:20pm W 2:00pm - 2:50pm *Restricted to College Park students in the Behavioral and Community Health major or the Public Health Science major.*	Seats (Total: 20) ONLINE ONLINE	 Discussion

EPIB301H **Epidemiology for Public Health Practice**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Public Health Science program; or must be in Community Health program. And must have earned a minimum of 45 credits. Cross-listed with HLTH301. Credit only granted for: EPIB301 or HLTH301.

An examination of the discipline of epidemiology and its application to public health issues and practices, covering current epidemiological concepts and methods.

0201	Natalie Slopen TuTh 3:30pm - 4:20pm M 9:00am - 9:50am	Seats (Total: 3) ONLINE ONLINE	 Discussion
0202	Natalie Slopen TuTh 3:30pm - 4:20pm W 1:00pm - 1:50pm	Seats (Total: 3) ONLINE ONLINE	 Discussion

0203	Natalie Slopen	Seats (Total: 3)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	W 2:00pm - 2:50pm	ONLINE	Discussion

EPIB315 **Biostatistics for Public Health Practice**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: FSAR

Prerequisite: Minimum grade of C- in EPIB301; or must have completed or be concurrently enrolled in HLTH200. Restriction: Must be in one of the following programs (Public Health Science; Community Health). Cross-listed with: HLTH300. Credit only granted for: EPIB300, EPIB315 or HLTH300. Formerly: EPIB300. Additional information: Course is cross-listed; students should check program advising information to determine which counts for their major. Note that EPIB300 (old number) is still offered for students under previous curriculum.

An examination of biostatistical concepts and procedures as they relate to contemporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

As agreed to during the change of major workshop or orientation to PHSC: PHSC students who declared their major BEFORE the spring 2018 semester are required to take EPIB300 before EPIB301. PHSC students who declared their major DURING the spring 2018 semester and later, are required to take EPIB301 before EPIB315.

0101	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	M 8:00am - 9:50am	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0102	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	M 10:00am - 11:50am	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0103	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	M 12:00pm - 1:50pm	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		

0104	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	M 2:00pm - 3:50pm	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0105	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	F 8:00am - 9:50am	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0106	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ONLINE	
	F 10:00am - 11:50am	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0201	Rodman Turpin	Seats (Total: 30)	
	TuTh 11:00am - 11:50am	ONLINE	
	M 4:00pm - 5:50pm	ONLINE	Discussion
	Restricted to students in the Behavioral and Community Health major.		
0202	Rodman Turpin	Seats (Total: 30)	
	TuTh 11:00am - 11:50am	ONLINE	
	F 12:00pm - 1:50pm	ONLINE	Discussion
	Restricted to students in the Behavioral and Community Health major.		
ESG1	Raul Cruz-Cano	Seats (Total: 35)	
	M 9:00am - 11:30am	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Restricted to Shady Grove students in the Public Health Science major.		

EPIB330 **The Coming Plague: Public Health Perspectives**

Credits: 3 Grading Method: Regular

Prerequisite: EPIB301.

Introduces students to the study of infectious disease through the application of epidemiologic methods. Students will review how infectious diseases impact global health, and examine epidemiological concepts related to infectious disease. These concepts include infectious disease transmission, prevention and control; study design; and outbreak and epidemic investigations. Infectious disease topics of concern to public health professionals will be covered including the COVID-19 pandemic, sexually transmitted infections, foodborne infections, healthcare-acquired infections and neglected tropical diseases, and future trends in the field of infectious diseases.

0101	Olivia Carter-Pokras	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ONLINE
	Restricted to PHSC students at the College Park campus.	

EPIB399 **Epidemiology and Biostatistics Independent Study**

Credits: 1-3 Grading Method: Regular

The EPIB undergraduate independent study is an opportunity for undergraduates from other departments in the SPH or the university to work with an Epidemiology and Biostatistics faculty member on research or special projects that are based out of EPIB.

Contact department for information to register for this course.

EPIB612 **Epidemiologic Study Design**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EPIB611.

Application of epidemiologic study designs, analytic methods used for analysis of cohort, case-control, cross-sectional, and clinical trials research.

Prequisties: EPIB650, EOIB610, and EPIB611.

0101	Hongjie Liu, Rodman Turpin	Seats (Total: 20)
	M 4:00pm - 6:45pm	ONLINE

EPIB630 **Epidemiologic Methods in Sexual and Reproductive Health Research**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in SPHL602; or EPIB610.

Examination of epidemiologic methods (quantitative and qualitative) for collecting and analyzing data on sexual and reproductive health. The emphasis will be to introduce students to the appropriate methods used for challenging and sensitive research topics such as sexual behavior, HIV/STI, drug use, sexual abuse.

0101	Typhanye Dyer	Seats (Total: 20)
	Tu 11:00am - 1:45pm	ONLINE

EPIB633 **Health Survey Design and Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPHL602 or EPIB610; or permission of Instructor. Recommended: EPIB697.

An overview of types of survey research designs, questionnaire design, measurement issues, and techniques for recruiting and interacting with participants. Students will discuss and implement a variety of health survey analysis techniques, including how to utilize SAS statistical software to estimate descriptive statistics and implement regression models, while accounting for complex survey designs.

0101	Quynh Nguyen	Seats (Total: 25)
	W 1:00pm - 3:45pm	ONLINE

EPIB651 **Applied Regression Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of B- from (SPHL602, EPIB650); or a minimum score of 70% on the SPHL602 or EPIB650 waiver exam. Recommended: EPIB697 or previous experience working with SAS is highly recommended.

An introduction to important statistical methods used in public health research, including nonparametric hypothesis testing, ANOVA, simple and multiple linear regression, logistic regression, and categorical data analysis.

0101	Mei-Ling Lee	Seats (Total: 20)
	Th 1:00pm - 3:45pm	ONLINE

EPIB652 **Categorical Data Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EPIB651. Recommended: EPIB697 or previous experience working with SAS is highly recommended.

Methods for analysis of categorical data as applied to public health research, including contingency tables, logistic regression, multicategory logic models, loglinear models, and models for matched-pairs.

0101	Tianzhou Ma	Seats (Total: 20)
	W 4:15pm - 7:00pm	ONLINE

EPIB655 **Longitudinal Data Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EPIB651.

Statistical models for drawing scientific inferences from longitudinal data, longitudinal study design, repeated measures and random effects to account for experimental designs that involve correlated responses, handling of missing data.

0101	Xin He	Seats (Total: 20)
	Tu 1:00pm - 3:45pm	ONLINE

EPIB697 **Public Health Data Management**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Permission of instructor.

This course is designed to provide students with the expertise needed to effectively manage research data using SAS as the statistical programming language.

0101	Raul Cruz-Cano	Seats (Total: 25)
	Tu 4:00pm - 6:45pm	ONLINE

EPIB778 **Internship in Public Health**

(Perm req)

Credits: 1-4 Grading Method: Regular

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

Contact department for information to register for this course.

EPIB786 **Capstone Project in Public Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of SPHL-Epidemiology & Biostatistics department.

Capstone experience providing opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Contact department for information to register for this course.

EPIB788 **Critical Readings in Epidemiology and Biostatistics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Open to master and doctoral students to discuss critical readings in Epidemiology and Biostatistics.

0101	Cher Dallal	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

EPIB798 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master or doctoral students who desire to pursue special research problems under the direction of a faculty memeber of the department may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

EPIB799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

EPIB898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EPIB899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

FGSM Federal and Global Fellows Fall 2020

FGSM310 **Political Engagement and Advocacy**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Federal Fellows Program; and permission of instructor. Cross-listed with: HONR378C.

An examination of questions and issues in the practice of political engagement and advocacy. Guest lecturers drawn from political, civic engagement, and advocacy arenas will visit class and participate in discussions.

0101	Kathleen Mogelgaard	Seats (Total: 21)
	Tu 6:00pm - 9:00pm	ONLINE

FGSM320 **Public Health Policy**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Federal Fellows Program; and permission of instructor. Credit only granted for: UNIV348P or FGSM320. Formerly: UNIV348P.

An exploration of the major questions and issues facing the U.S. health care system as well as the formulation and implementation of health policy.

Cross-listed with HONR378E. Credit granted for FGSM320 or HONR378E.

0101	Samuel Kessel	Seats (Total: 21)
	Tu 3:30pm - 6:30pm	ONLINE

FGSM330 **Homeland and National Security Policy**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Federal Fellows Program; and permission of instructor. Credit only granted for: UNIV348T or FGSM330. Formerly: UNIV348T.

An examination of the concept of U.S. homeland and national security, threats, and major vulnerabilities in the context of recent history.

Cross-listed with HONR378G. Credit granted for FGSM330 or HONR378G.

0101	John Dermody, Casie Kagalis	Seats (Total: 20)
	M 6:00pm - 9:00pm	ONLINE

FGSM340 **Energy and Environmental Policy**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Federal Fellows Program; and permission of instructor. Credit only granted for: UNIV348E or FGSM340. Formerly: UNIV348E.

An examination of issues of energy and environmental sustainability through an investigation of policy-making in energy, climate change, and sustainable development.

Cross-listed with HONR378J. Credit granted for FGSM340 or HONR378J.

0101	Ed Fendley	Seats (Total: 20)
	M 3:30pm - 6:30pm	ONLINE

FGSM350 **Critical Regions and International Relations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor.

An examination of international relations and foreign policy challenges in critical regions.

Cross-listed with HONR378K. Credit granted for FGSM350 or HONR378K.

0101	Danusia Hubah	Seats (Total: 20)
	Th 7:00pm - 10:00pm	ONLINE

FGSM360 **U.S. Diplomacy and Policymaking**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor.

An examination of questions and issues in the practice of contemporary diplomacy and policy-making. Guest lecturers drawn from Washington policy-making and foreign service communities will visit class and participate in discussion.

Cross-listed with HONR378A. Credit granted for FGSM360 or HONR378A.

0101	Paul Maykish, William Usher	Seats (Total: 20)
	Th 7:30pm - 10:00pm	ONLINE

FGSM370 **Science Diplomacy: Foreign Policy & Science, Technology, and Innovation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor. Credit only granted for: UNIV389F or FGSM370. Formerly: UNIV389F.

An exploration of the critical roles scientific knowledge and technological innovation play in the formation and implementation of foreign policy issues, including energy and climate change, public health, space and innovation, and economic development.

Cross-listed with HONR378D. Credit granted for FGSM370 or HONR378D.

0101	Griffin Thompson, Jonathan Margolis W 5:30pm - 8:30pm	Seats (Total: 20) ONLINE

FGSM380 **Responses to Global Challenges**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor. Credit only granted for: UNIV389B or FGSM380. Formerly: UNIV389B.

An examination of global issues and responses primarily from the perspective of the practitioner. The focus will be on social, humanitarian, and human rights issues in different global contexts.

Cross-listed with HONR378B. Credit granted for FGSM380 or HONR378B.

0101	Rhoda Margesson W 5:30pm - 8:30pm	Seats (Total: 20) ONLINE

FGSM390 **Water Security and Global Health Challenges**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor. Cross-listed with: HONR378M.

An examination of questions and issues of water security and global health. Expert practitioners will also visit class and participate in discussions.

0101	Jonathan Margolis W 3:00pm - 6:00pm	Seats (Total: 21) ONLINE

FILM Film Studies Fall 2020

FILM245 **Film Form and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU

Cross-listed with: ENGL245. Credit only granted for: ENGL245, CINE245 or FILM245. Formerly: FILM245.

Introduction to film as art form and how films create meaning. Basic film terminology; fundamental principles of film form, film narrative, and film history. Examination of film technique and style over past one hundred years. Social and economic functions of film within broader institutional, economic, and cultural contexts.

0101	Mauro Resmini MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Mauro Resmini MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Mauro Resmini MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0104	Mauro Resmini MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

FILM298A **Special Topics in International Film Studies; Masterpieces in French and Francophone Cinemas**

Credits: 3 | Grading Method: Regular, Pass-Fail

Special topics in International Film.

Cross-listed with FILM298A. Credit granted for FREN243 or FILM298A This course, taught in English, will present a large array of films directed by famous French directors (Jean Renoir, Robert Bresson, Jean-Luc Godard, Agnes Varda, etc..) and Francophone filmmakers (Arcand, Sembene) who were internationally known in their time and have had a considerable influence on today's filmmakers in the U.S. (Tarantino, Lynch, Lee, etc..) and abroad (Sissoko, Angelopoulos, VonTrier, ect..).

0101	Caroline Eades TuTh 3:30pm - 4:45pm	Seats (Total: 30) ONLINE	

FILM298B **Iranian Cinema**

Credits: 3 Grading Method: Regular General Education: DSHU

Cross-listed with: PERS283. Credit only granted for: PERS283 or FILM298B.

Introduction to Iranian cinema, society, and culture. Taught in English.

0101	Matthew Miller MW 3:30pm - 4:45pm	Seats (Total: 30) ONLINE

FILM298D **Special Topics in International Film Studies; Film Art in a Global Society**

Credits: 3 Grading Method: Regular

Special topics in International Film.

Cross-listed with CMLT280. Credit only granted for: CMLT280 or FILM298D.

0101	Kyle Bickoff MWF 1:00pm - 1:50pm	Seats (Total: 30) ONLINE
0201	William Pittman TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE

FILM301 **Cinema History I: The Silent Era**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENGL245, CINE245, or FILM245; or permission of ARHU-College of Arts & Humanities. Credit only granted for: CINE301 or FILM301. Formerly: FILM301.

Examines the development of silent cinema from the 1890s to the early 1930s drawing on at least five distinct national traditions (French, German, Russian, British, and American). Introduces students to key cinematic conventions as they emerged around the world.

0101	Elizabeth Papazian MW 10:00am - 11:50am	Seats (Total: 30) ONLINE

FILM319K **Special Topics in Documentary, Animation, Experimental Cinema, and Other Visual Media; The Disney Studio and the Animation Industry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine the possibilities of non-narrative cinema, or cinema that is structured differently from the fiction feature film, as well as other media (television, digital imagery, and photography) that entertain a close relationship with cinema in terms of form, content, and audience. Content varies.

Cross-listed with ENGL329L. Credit granted for ENGL329L or FILM319K. Prerequisite: ENGL245, FILM245, SLLC283, or FILM283: or permission of instructor.

0101	Paul Cote	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

FILM329E **Special Topics in National/International Cinemas; Soviet Film: Soviet Cinema and Culture after Stalin**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

Cross-listed with RUSS398F. Credit granted for RUSS398F or FILM329E.

0101	Elizabeth Papazian	Seats (Total: 30)
	MW 12:00pm - 1:50pm	ONLINE

FILM329G **Special Topics in National/International Cinemas; Hollywood and Politics in the 20th Century**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

Cross-listed with FILM329G. Credit granted for HIST319W or FILM329G. How the American film industry, American films, and the Hollywood community have interacted in the course of the 20th century.

0101	Saverio Giovacchini	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	ONLINE

FILM329R **Special Topics in National/International Cinemas; The Mafia: From Corleone to Hollywood**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

Crosslisted with ITAL499M. Credit only granted for ITAL499M or FILM329R.

0101	Mauro Resmini	Seats (Total: 25)
	MW 3:30pm - 4:45pm	ONLINE

FILM359B **Special Topics in Genres/Auteurs/Cinema Movements; TV Genres in Context: Israeli Serials and American TV**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine narrative cinema from the perspective of content (themes, issues, structures) and style through the lens of genre, auteurship (a concept of authorship in film studies), and/or historical aesthetic movements that have been influential in the development of cinema as an art and film studies as a field. Content varies.

Cross-listed with ISRL329B. Credit granted for FILM359B or ISRL329B. Over the past decade, the prominence of Israeli television series has skyrocketed, both within Israel and internationally. In the U.S., Israeli tv shows have become some of the most popular on Netflix (Fauda, Shtisel), HBO (Our Boys, In Treatment), Hulu (Prisoners of War, the basis of Showtime s Homeland), and even ABC, which recently adapted the Israeli show Beauty and the Baker and retitled it wait for it! The Baker and the Beauty. This course will examine through critical analysis recent Israeli television fiction series and ask two related, fundamental questions: 1) what do these shows reflect and teach us about current Israeli culture, society, and politics; and 2) what makes these shows so adaptable and popular outside the country, especially in America.

0101	Eric Zakim	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

FILM359P **Special Topics in Genres/Auteurs/Cinema Movements; The Films of Martin Scorsese**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine narrative cinema from the perspective of content (themes, issues, structures) and style through the lens of genre, auteurship (a concept of authorship in film studies), and/or historical aesthetic movements that have been influential in the development of cinema as an art and film studies as a field. Content varies.

Also offered as ENGL329P. Credit granted for ENGL329P or FILM359P. Prerequisite: ENGL245, FILM245, FILM283, or SLLC283; or permission of department.

0101	Marianne Conroy	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

FILM359X **Special Topics in Genres/Auteurs/Cinema Movements; Classic Foreign Films**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Examine narrative cinema from the perspective of content (themes, issues, structures) and style through the lens of genre, auteurship (a concept of authorship in film studies), and/or historical aesthetic movements that have been influential in the development of cinema as an art and film studies as a field. Content varies.

Cross-listed with ARTH389Q. Credit only granted for ARTH389Q or FILM359X. Students will explore classic foreign films from India, Japan, China, France, Italy, Germany, Denmark, Sweden, Russia, and other countries. This course is designed to enable students to examine historically and artistically significant films made since 1945 by some of the most important directors in world cinema. By examining these representative examples of classic foreign films (such as The 400 Blows, Bicycle Thieves, Red Sorghum) in their geopolitical and institutional contexts, students will learn and understand how these films embody as well as give expression to modern and contemporary culture, society, and history. All films are subtitled.

0101	Jason Kuo	Seats (Total: 25)
	Tu 2:00pm - 4:30pm	ONLINE

FILM369N **Special Topics in Film Theories; Sound, Voice, Music**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Examines specific methodologies (structuralism, feminism, postcolonialism, etc.) for the critical analysis of film. The course will also consider the historical development of theoretical concepts. Content varies.

0101	Eric Zakim	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

FILM385 **German Cinema**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHU

Cross-listed with: GERM385. Credit only granted for: GERM385, CINE385 or FILM385. Formerly: FILM385.

A history of German cinema from the golden age of silent films to the flourishing film culture of the 21st Century. Focuses on changing ideas of the role and purpose of national cinema, as well as the cinematic representation of nation and national identity. Taught in English.

0101	Hester Baer	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

FILM388 **Experiential Learning: Cinema and Media Studies**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail

Connects students' theoretical understanding of film studies, as obtained through the classroom, to professional experience.

Contact department for information to register for this course.

FILM421 **Francophone African Film**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHU, DVUP

Cross-listed with: FREN421. Credit only granted for: FREN421, CINE421 or FILM421. Formerly: FILM421.

Imaginary and Memory in the reality of Francophone African Film from 1960-present. Taught in English.

0101	Valerie Orlando	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

FILM429G **Special Topics in National/International Cinemas; Global Art Cinemas**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Courses in National/International Cinemas may examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

Cross-listed with ARTH489Q. Credit granted for ARTH489Q or FILM429G. Global art cinemas often challenge their audiences and demand more active engagement because of their unconventional modes of story-telling and their emphases on the directors personal expressions. Students will critically examine some of the most talked-about and engaging art films; they will also consider the influence of art history on the films by such great directors as Wong Kar-wai, Bresson, Visconti, Scorsese, Figueroa, Varda, Campion, Reichardt, Potter, Tarantino, Greenaway, and Resnais.

0101	Jason Kuo	Seats (Total: 15)
	Th 2:00pm - 4:30pm	ONLINE

FILM469G **Special Topics in Film Theories II; Cinema in the History of Media**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in film theories.

0101	Luka Arsenjuk Tu 3:30pm - 6:00pm	Seats (Total: 15) ONLINE

FILM499 **Directed Study in Cinema and Media Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Readings and Research in Film Studies under faculty supervison.

Contact department for information to register for this course.

FIRE First-Year Innovation & Research Experience — Fall 2020

FIRE120 **FIRE SEMESTER 1**

Credits: 3 Grading Method: Regular General Education: DSSP

Additional information: This is the first course in the FIRE (First-Year Innovation & Research Experience) program sequence.

Engages the research process through the design, research, collaborative authorship and iterative review-based refinement of research proposals. Students find and analyze primary literature, think creatively, author and communicate research proposals in a scholarly fashion and work collaboratively to solve scientific and societal problems using technology, delegation and productive team communication.

0101	Carolina Vieira M 12:00pm - 12:50pm Class time/details on ELMs *This section restricted to BioFIRE students.*	Seats (Total: 35) ONLINE ONLINE
0201	Cristina Risco F 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
0301	Emina Herovic M 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
0401	Yun Choi M 3:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE

0501	Benjamin Huffman M 4:00pm - 4:50pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
0601	Cherisse Hall F 9:00am - 9:50am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
0701	Raymond H Tu F 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
0801	Catherine Spirito M 1:00pm - 1:50pm Class time/details on ELMs *This section restricted to BioFIRE students.*	Seats (Total: 35) ONLINE ONLINE
0901	Jonathan Goodson F 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
1101	Muge Karagoz F 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
1201	Derrick Yeo F 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
1301	Alexandra Jones F 3:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
1401	Thanicha Ruangmas F 4:00pm - 4:50pm Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE
1501	Ian Page W 9:00am - 9:50am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE

1601	Jessica O'Hara M 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	
1701	Molly Goodfellow Tu 9:30am - 10:20am Class time/details on ELMs	Seats (Total: 42) ONLINE ONLINE	
FCB1	Carolina Vieira W 5:00pm - 5:50pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 40) ONLINE ONLINE	Discussion

FIRE298 **FIRE Semester 3**

Credits: 3 Grading Method: Regular General Education: DSSP

Capstone course in the FIRE (First-Year Innovation & Research Experience) program sequence. Students in this course transition from trainee to practitioner in their lab. This course focuses on the concepts related to the process of independent research including collaboration with peers, communication of ideas, troubleshooting unexpected outcomes, and discipline-specific methodologies.

0101	Thanicha Ruangmas Tu 11:00am - 11:50am Class time/details on ELMs *Sustainability Analytics.*	Seats (Total: 40) ONLINE ONLINE	
0102	Carolina Vieira W 12:00pm - 12:50pm Class time/details on ELMs *Found in Translation.*	Seats (Total: 38) ONLINE ONLINE	
0103	Emina Herovic Tu 12:30pm - 1:20pm Class time/details on ELMs *Risk Communication & Resilience.*	Seats (Total: 10) ONLINE ONLINE	
0104	Cristina Risco W 3:00pm - 3:50pm Class time/details on ELMs *Addiction Science.*	Seats (Total: 38) ONLINE ONLINE	

0105	Yun Choi W 4:00pm - 4:50pm Class time/details on ELMs *Transgenerational Brain Initiative.*	Seats (Total: 38) ONLINE ONLINE
0106	Molly Goodfellow Th 11:00am - 11:50am Class time/details on ELMs *Animal and Human Relationships - Human Relationships Research Team.*	Seats (Total: 20) ONLINE ONLINE
0107	Molly Goodfellow Th 11:00am - 11:50am Class time/details on ELMs *Animal and Human Relationships - Animal Relationships Research Team.*	Seats (Total: 15) ONLINE ONLINE
0108	Derrick Yeo Tu 3:30pm - 4:20pm Class time/details on ELMs *Autonomous Unmanned Systems.*	Seats (Total: 40) ONLINE ONLINE
0109	Jonathan Goodson Th 12:30pm - 1:20pm Class time/details on ELMs *Transcriptomics of Disease.*	Seats (Total: 40) ONLINE ONLINE
0111	Emina Herovic Class time/details on ELMs Class time/details on ELMs *Phillips Virtual Culture.*	Seats (Total: 40) ONLINE ONLINE
0112	Raymond H Tu W 2:00pm - 2:50pm Class time/details on ELMs *Capital One Machine Learning.*	Seats (Total: 40) ONLINE ONLINE
0113	Catherine Spirito W 10:00am - 10:50am Class time/details on ELMs *Engineering Biosensors.*	Seats (Total: 38) ONLINE ONLINE

0114	Cherisse Hall Th 2:00pm - 2:50pm Class time/details on ELMs *Bacterial Pathogenesis.*	Seats (Total: 38) ONLINE ONLINE
0115	Benjamin Huffman Th 9:30am - 10:20am Class time/details on ELMs *Global Development & Design.*	Seats (Total: 40) ONLINE ONLINE
0116	Muge Karagoz Tu 2:00pm - 2:50pm Class time/details on ELMs *Simulating Particle Detection.*	Seats (Total: 40) ONLINE ONLINE
0117	Alexandra Jones W 1:00pm - 1:50pm Class time/details on ELMs *Cloud Computing.*	Seats (Total: 30) ONLINE ONLINE
0118	Jessica O'Hara W 11:00am - 11:50am Class time/details on ELMs *Host-Pathogen Interactions.*	Seats (Total: 38) ONLINE ONLINE

FMSC Family Science Fall 2020

FMSC110S **Families and Global Health**

Credits: 3 Grading Method: Regular General Education: DSHS, DVCC

Students will explore, define, and study global health, social determinants of health, health inequalities, gender inequality, family violence, and maternal and child health using a global perspective.

0101	Elisabeth Maring TuTh 11:00am - 12:15pm *Restricted to CPSP Global Public Health students.*	Seats (Total: 96) ONLINE

FMSC170 **Modern Families**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Credit only granted for: FMSC170 or FMSC298F. Formerly: FMSC298F.

Examination of current trends and controversial issues in family life, including issues of marriage, reproductive technologies, adoption, child custody, remarriage, and marital violence.

FC01	Kimberly Van Putten-Gardner	Seats (Total: 50)
	Class time/details on ELMs	ONLINE
	Restricted to students in Freshmen Connection.	

FMSC186 **Family Law and Ethics in Assisted Reproduction**

Credits: 1 | Grading Method: Regular

For students interested in studying the law, public health and/or family science, this course examines the cutting-edge law and ethics of assisted reproduction including the technologies of sperm and egg donation, in vitro fertilization, surrogacy, and reproductive organ transplants, and the impact on families.

FCW1	Kerry Tripp	Seats (Total: 25)
	Meets October 19, 2020 - December 14, 2020	
	Class time/details on ELMs	ONLINE
	Restricted to students in Freshmen Connection.	

FMSC190 **Man Up! Where Are The Fathers?**

Credits: 3 | Grading Method: Regular | General Education: DSHS, SCIS

An examination of changing fatherhood roles, health, and inequality in diverse families. Focus will be on masculinities and disparities among men by race and class; provider role expectations; and trauma and violence faced by men in contemporary society.

0101	Kevin Roy	Seats (Total: 50)
	MWF 11:00am - 11:50am	ONLINE

FMSC260 **Couple Relationships**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Credit only granted for: FMSC260 or FMST260. Formerly: FMST260.

Couple relationships and their alternatives in contemporary dating, courtship and marriage.

Restricted to Majors or non-majors with less than or equal to 60 credits.

0101	Elise Resnick	Seats (Total: 55)
	TuTh 12:30pm - 1:45pm Contact instructor or department for details.	ONLINE

FMSC286 **Assisted Reproduction Law and Policy in the US and Brazil**

Credits: 3 Grading Method: Regular

Credit only granted for: FMSC186 or FMSC286. Additional information: This is a global classroom course where students will learn online, meet once a week in a synchronous class on Webex with their Brazilian classmates, and work individually via Webex in small international groups.

In this Global Classroom, U.S. students will work synchronously online with their international partners in Brazil to critically think about cutting-edge ethical, legal, policy and scientific issues in the field of Assisted Reproduction Technologies (ART) in the two countries. This course looks at conventional families created in unconventional ways to examine such topics as sperm and egg donation, in vitro fertilization, surrogacy, reproductive organ transplants and more - while considering the social, cultural, racial, religious, economic, or socioeconomic contexts that influence each. Students will work with their foreign peers in small groups to compare ART in each country and then create proposed legislation for either the U.S. or Brazil which their international group will present online to their colleges and submit to the country's legislators. In so doing, students will be challenged to think critically and see their place in creating actionable change in a global society.

0101	Kerry Tripp	Seats (Total: 15)
	Tu 3:00pm - 4:00pm Class time/details on ELMs	ONLINE ONLINE

FMSC290 **Family Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: FMSC290 or FMST290. Formerly: FMST290.

Application of economic methodology to study families under various economic situations. Examination of how decisions about marriage, divorce, fertility, consumption and time use are influenced by labor/housing markets, tax structure, social welfare benefits and other economic considerations.

Restricted to Majors or non-majors with less than or equal to 60 credits.

0101	Manouchehr Mokhtari	Seats (Total: 50)
	TuTh 4:00pm - 5:15pm	ONLINE

FMSC302 **Research Methods in Family Science**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHS, DSSP

Prerequisite: Must have completed an introductory statistics course. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC302 or FMST302. Formerly: FMST302.

Introduction to the methods of the social and behavioral sciences employed in family science. The role of theory, the development of hypotheses, measurement, design, and data analysis.

0101	Jessica Fish TuTh 9:30am - 10:45am	Seats (Total: 75) ONLINE

FMSC310 **Maternal, Child and Family Health**

Credits: 3	Grading Method: Regular, Pass-Fail

Credit only granted for: FMSC310, FMSC410 or FMSC498A. Formerly: FMSC498A and FMSC410. Additional information: A comprehensive understanding of maternal, child, and family health, with additional emphasis on environmental health, needs assessment and evaluation, enabling students to more effectively address issues in the workplace.

Overview of the major issues in Maternal, Child, and Family Health in the U.S. and the world. The course will cover the social, political, environmental, and economic factors that shape the health of women, children, and families throughout the life course. It will employ the core disciplines of public health -- 1) epidemiology/biostatistics, 2) environmental health, 3) health policy and administration, and 4) social and behavioral health -- to examine these factors. The course introduces specific issues and interventions and places these issues and interventions within their broad sociohistorical context.

0101	Marie Thoma MWF 11:00am - 11:50am	Seats (Total: 45) ONLINE
0201	Edmond Shenassa TuTh 11:00am - 12:15pm	Seats (Total: 45) ONLINE
0401	Julia Steinberg TuTh 9:30am - 10:45am	Seats (Total: 45) ONLINE

FMSC330 **Family Theories and Patterns**

Credits: 3	Grading Method: Regular, Audit	General Education: DSHS, DVUP

Restriction: Junior standing or higher. Credit only granted for: FMSC330 or FMST330. Formerly: FMST330.

Theory and research on the family, including a cross-cultural analysis of family patterns.

0101	Amy Morgan TuTh 9:30am - 10:45am	Seats (Total: 60) ONLINE
0501	Patricia Fanflik MWF 8:00am - 8:50am	Seats (Total: 45) ONLINE

FMSC332 **Children in Families**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Prerequisite: PSYC100 or FMSC105. Credit only granted for: FMSC332 or FMST332. Formerly: FMST332.

A family life education approach to the study of children and families. Emphasis on the interaction of children with parents, siblings, extended kin, and the community.

0101	Amy Lewin TuTh 11:00am - 12:15pm	Seats (Total: 65) ONLINE
0201	Amy Lewin TuTh 2:00pm - 3:15pm	Seats (Total: 60) ONLINE
0301	Christine Schull MW 8:00am - 8:50am F 8:00am - 8:50am	Seats (Total: 65) ONLINE ONLINE

FMSC341 **Personal and Family Finance**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Credit only granted for: FMSC341 or FMST341. Formerly: FMST341.

Individual and family financial strategies with emphasis on financial planning, savings, investments, insurance, income taxes, housing, and use of credit. Planning, analyzing, and controlling financial resources to resolve personal/family financial problems and to attain financial security.

0101	Manouchehr Mokhtari TuTh 5:30pm - 6:45pm	Seats (Total: 45) ONLINE

0201	William Knight Class time/details on ELMs	Seats (Total: 45) ONLINE

FMSC381 **Poverty, Affluence, and Families**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit , D | General Education: DSHS, DVUP

Prerequisite: SOCY100 or SOCY105. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC381 or FMST381. Formerly: FMST381.

Social, political, cultural and economic factors influencing income and wealth in American families.

0101	Kevin Roy MWF 9:00am - 9:50am	Seats (Total: 40) ONLINE
0201	Natasha Williams TuTh 3:30pm - 4:45pm	Seats (Total: 40) ONLINE

FMSC383 **Delivery of Human Services to Families**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FMSC330. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC383 or FMST383. Formerly: FMST383.

Processes of service delivery with special emphasis upon relationships among managers, service providers and clients. The impact of human service systems on families.

0101	Marian Jones MWF 11:00am - 11:50am	Seats (Total: 60) ONLINE

FMSC399 **Independent Study**

(Perm req)

Credits: 1-6 | Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

FMSC432 **Adult Development and Aging in Families**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100; and (SOCY100 or SOCY105). And FMSC332; or must have completed a comparable development course. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC432 or FMST432. Formerly: FMST432.

Theory, research, history, and programming related to adult development and aging in the intergenerational context of family.

0201	Jodi Cobb	Seats (Total: 40)	
	MWF 12:00pm - 12:50pm	ONLINE	

FMSC460 **Violence in Families**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

Prerequisite: SOCY100, SOCY105, or PSYC100. Credit only granted for: FMSC460 or FMST460. Formerly: FMST460.

Theories of child, spouse, and elder abuse in the family setting. Emphasis on historical, psychological, sociological and legal trends relating to physical, emotional, and sexual abuse. Introduction to methods for prevention and remediation.

0101	Christine Schull	Seats (Total: 50)	
	MWF 9:00am - 9:50am	ONLINE	

FMSC477 **Internship and Analysis in Family Science**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FMSC383; and 9 credits in FMSC courses; and permission of SPHL-Family Science department. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC477, FMST347, or FMST477. Formerly: FMST477.

A supervised internship and a seminar requiring analysis. Opportunities to integrate theory and practice including 120 hours of contracted field experience. Summer or fall internship contracts due May 1; Spring contracts due December 1. See department for application procedures.

0101	Zachary Berman	Seats (Total: 50)	
	M 1:00pm - 2:30pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

FMSC487 **Family Law**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Designed for students interested in studying the law, public health, and family science, this course provides students with a general overview of family law and the impact on healthy families. The course also includes the study of cutting-edge issues such as marriage equality, assisted reproduction and ethical issues that may arise.

0101	Kerry Tripp Tu 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE
0201	Kerry Tripp Tu 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 45) ONLINE ONLINE

FMSC498 **Special Topics: Family Science; Family Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Special course topics in family studies.

Contact department for information to register for this course.

FMSC498H **Special Topics: Family Science; Family Studies Honors Thesis**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special course topics in family studies.

Contact department for information to register for this course.

FMSC498P **Special Topics: Family Science**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special course topics in family studies.

0101	Adele Robinson TuTh 9:30am - 10:45am	Seats (Total: 24) ONLINE

FMSC640 **Family Therapy: Theory and Techniques**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: FMSC640 or FMST640. Formerly: FMST640.

Overview of fundamental theoretical concepts and clinical procedures in marital and family therapy, with an emphasis on those therapies which operate from a family systems perspective.

0101	Patricia Barros M 10:00am - 12:45pm Class time/details on ELMs	Seats (Total: 11) Location: TBA ONLINE

FMSC642 **Normal and Abnormal Individual and Family Development**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: FMSC640. Credit only granted for: FMSC642 or FMST642. Formerly: FMST642.

Normal development and psychopathology in the family system. Emphasis on parent-child relationships and application of the current Diagnostic and Statistical Manual of Mental Disorders (DSM) to family therapy.

Formerly: FMST642. Credit only granted for FMSC642 or FMST642. Prerequisite: FMSC640. Normal development and psychopathology in the family system. Emphasis on parent-child relationships and application of the current Diagnostic and Statistical Manual of Mental Disorders (DSM) to family therapy.

0101	Elise Resnick Class time/details on ELMs	Seats (Total: 15) ONLINE

FMSC650 **Ethical, Legal, and Professional Principles in Couple and Family Therapy**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of SPHL-Family Science department. Restriction: Must be in Couple and Family Therapy (Master's) program.

This course offers an introduction to the basic principles and practices in couple and family therapy. It covers major theoretical approaches to couple and family therapy, linking core concepts to practical aspects of assessment and treatment. Readings, didactic presentations by the instructor, and class discussions are designed to build students' knowledge of both generic therapy skills and specific techniques within each theoretical model. Emphasis is given to professional ethics, standards, and clinical skills/techniques necessary for the beginning family practitioner. Students become familiar with professional ethical codes as well as ethical decision-making models and how to apply them in clinical practice. In-class roleplays are used for practicing specific assessment and treatment methods, as well as for gaining experience in responding appropriately to a variety of common professional and ethical issues that arise in clinical practice.

0101	Jodi Cobb Tu 9:00am - 11:45am	Seats (Total: 25) ONLINE

FMSC652 **Psychopathology and Diagnosis in Family Systems**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: FMSC651. Restriction: Must be in Couple and Family Therapy (Master's) program.

The purpose of this course is to assist intermediate family therapists in further developing their knowledge, clinical, and professional expertise by deepening their understanding of major child and adult psychopathology. Further, students will learn to apply this knowledge to their clinical work, particularly in addressing individual family members' psychopathology within the context of family relationships. Major foci of the course include assessment and diagnostic interviewing in family therapy, and intervention with forms of psychopathology such as depression, anxiety disorders, substance abuse, and major mental disorders with clients who present for couple and family therapy.

0101	Mona Mittal Tu 9:00am - 11:45am	Seats (Total: 20) ONLINE

FMSC658 **Supervised Clinical Practice in Couple and Family Therapy**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

This course is designed to provide supervision of family, couple, and individual therapy client contact. This course is limited to, and required of, all students admitted to the Couples and Family Therapy (CFT) Program. Supervision utilizes various family systems models and differing methods are employed.

Prerequisite: FMST 650 and permission of instructor.

0101	Patricia Barros W 9:00am - 12:00pm Class time/details on ELMs	Seats (Total: 20) Location: TBA ONLINE

FMSC689 **Research Internship**

(Perm req)

Credits: 3 Grading Method: Regular

Research experience resulting in a scholarly article suitable for publication in a peer-reviewed journal.

Contact department for information to register for this course.

FMSC698 **Advanced Topics in Family Science**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Arranged group study on specific topic which may vary from term to term.

Must have written permission of faculty member and chairperson.

Contact department for information to register for this course.

FMSC698A **Advanced Topics in Family Science**

Credits: 1-3

Grading Method: Regular, Audit

Arranged group study on specific topic which may vary from term to term.

0101	Mona Mittal	Seats (Total: 15)
	Th 10:00am - 12:45pm	ONLINE

FMSC699 **Independent Study**

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

Contact department for information to register for this course.

FMSC710 **Maternal and Child Health from a Life Course Perspective**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: FMSC710 or FMST710. Formerly: FMST710.

Survey of current science in maternal and child health informed by a life course perspective. The surveyed topics include inutero exposure to toxins, feeding and growth, and effects of chronic stress, maternal and child health.

0101	Edmond Shenassa	Seats (Total: 12)
	Tu 2:00pm - 4:45pm	ONLINE

FMSC745 **Gender and Ethnicity in Family Therapy and Service Delivery**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: FMSC745 or FMST745. Formerly: FMST745.

Major critiques of sources of racial, cultural, and gender bias in marital and family therapy and family service delivery. Addresses these issues in program development and clinical practice.

0101	Mariana Falconier Th 9:00am - 11:45am Class time/details on ELMs	Seats (Total: 15) Location: TBA ONLINE

FMSC750 **Family and Health Policy**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: FMSC750 or FMST750. Formerly: FMST750.

Development and analysis of public policies affecting the health and well-being of children, youth, and families, with an emphasis on low income and ethnic minority populations. Examination of social, economic, and political dynamics that influence family and health policies and the delivery of health care. Introduction to health advocacy within the US public health system.

0101	Adele Robinson W 9:30am - 12:15pm	Seats (Total: 16) ONLINE

FMSC789 **Non-Thesis Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Non-thesis option research papers.

Contact department for information to register for this course.

FMSC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Must have written permission of faculty member and chairperson.

Contact department for information to register for this course.

FMSC879 **Preparing Future Faculty and Professionals Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Development of skills necessary to obtain and succeed in academic and non-academic positions in family science and public health. Topics include: career mapping, networking, teaching/teaching portfolios, independent research, publishing, grant writing, program and policy evaluation, consulting, job search, interviewing and negotiation, mentoring, diversity, work-family balance, and ethical issues in the workplace. Periodic visits to universities and government/nonprofit employers.

Development of skills necessary to obtain and succeed in academic and non-academic positions in family science and public health.

0101	Sandra Quinn W 1:00pm - 1:50pm	Seats (Total: 10) ONLINE

FMSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

FMSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

FREN French Fall 2020

FREN103 **Intensive Elementary French**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed FREN102; and must not be a native/fluent speaker of French. Credit only granted for: FREN102 or FREN103.

Covers speaking, reading, writing, listening, and culture of French-speaking world.

0101	Clara Bichon MWF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
0102	Samuel Blank MWF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
0103	Clara Danos MWF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

FREN203 **Intensive Intermediate French**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: FREN103; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of French. Credit only granted for: FREN201 or FREN203.

Covers speaking, reading, writing, listening, and culture of French-speaking world.

0101	Theavy Din MWF 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
0102	Madeline Muravchik MWF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
0103	Madeline Muravchik MWF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
0104	Mary Ellen Scullen MWF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

FREN204 **French Grammar and Composition**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: FREN201 or FREN203; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Not open to native/fluent speakers of French.

Intensive study of French grammar and composition.

0101	Guilhem Le Saux MWF 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
0102	Guilhem Le Saux MWF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

FREN211 **French Reading and Conversation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: FREN201 or FREN203. Restriction: Must not be a native/fluent speaker of French.

Practice in spoken French at intermediate level based on readings in a variety of genres. Written homework and exams.

Contact department for information to register for this course.

FREN243 **Masterpieces in French and Francophone Cinemas**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA, D | General Education: DSHU

This course, taught in English, will present a large array of films directed by famous French directors (Jean Renoir, Robert Bresson, Jean-Luc Godard, Agnes Varda, etc..) and Francophone filmmakers (Arcand, Sembene) who were internationally known in their time and have had a considerable influence on today's filmmakers in the U.S. (Tarantino, Lynch, Lee, etc..) and abroad (Sissoko, Angelopoulos, VonTrier, ect..).

Cross-listed with FILM298A. Credit granted for FREN243 or FILM298A.

0101	Caroline Eades TuTh 3:30pm - 4:45pm	Seats (Total: 30) ONLINE

FREN250 **Introduction to Cultural and Textual Analysis**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

Prerequisite: FREN204; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French. Credit only granted for: FREN250 or FREN250H.

Introduction to cultural and textual analysis of selected readings from various genres in French literature. Taught in French.

Jointly offered with FREN 250H.

0101	Caroline Eades TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE
0201	Inaam Ngadi MW 2:00pm - 3:15pm	Seats (Total: 25) ONLINE

FREN250H **Introduction to Cultural and Textual Analysis**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

Prerequisite: FREN204; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French. Credit only granted for: FREN250 or FREN250H.

Introduction to cultural and textual analysis of selected readings from various genres in French literature. Taught in French.

For general honors students only. Jointly offered with FREN 250.

0101	Caroline Eades TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE
0201	Inaam Ngadi MW 2:00pm - 3:15pm	Seats (Total: 25) ONLINE

FREN269F **Special Topics in Study Abroad II; French Conversation I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN269G **Special Topics in Study Abroad II; French Conversation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN269P **Special Topics in Study Abroad II; Perspectives on Contemporary France**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN301 **Composition and Style**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN250; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French.

Grammatical analysis, elements of style; range of written genres.

0101	Leandra Cormier TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE
0201	Leandra Cormier TuTh 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

FREN302 **Translation: French to English**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

Practicum in translation primarily from French to English; contrastive analysis.

0101	Maria Beliaeva Solomon TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE

FREN306 **Commercial French I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

Introduction to commercial French including correspondence and business terminology. Emphasis on cross-cultural concepts needed for successful interaction within business settings. Taught in French.

Contact department for information to register for this course.

FREN311 **Advanced Oral Expression**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN250; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French.

Linguistic and thematic analysis of written, audio, and visual texts. Focus on aural and oral skills. Some written assignments and evaluation.

Contact department for information to register for this course.

FREN312 **France Today**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French.

Analysis and discussion of current events and institutions using various French media resources.

0101	Herve Campangne MW 2:00pm - 3:15pm *This section is partially synchronous.*	Seats (Total: 25) ONLINE

FREN351 **From Romanticism to the Age of Modernism and Beyond**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

A survey of the chief authors and major movements of French literature from Pre-Romanticism to the present.

Jointly offered with FREN 351H.

0101	Maria Beliaeva Solomon TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE

FREN351H **From Romanticism to the Age of Modernism and Beyond**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

A survey of the chief authors and major movements of French literature from Pre-Romanticism to the present.

Cross-listed with FREN351.

0101	Maria Beliaeva Solomon TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE

FREN352 **From the Age of Epic and Romance to the Enlightenment**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

A survey of the chief authors and major movements of French literature from the Middle Ages to the end of the 18th century.

Contact department for information to register for this course.

FREN369F **Special Topics in Study Abroad III; Third Year French I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN369G **Special Topics in Study Abroad III; Third-Year French II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN369Y **Special Topics in Study Abroad III; Fourth-Year French I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

FREN387 **Critical Writing on France and the French-Speaking World**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301. Restriction: Not open to Native speakers.

Intensive writing course based on focused study of issues and concerns drawn from French and Francophone literatures, films, and cultures. Elements of style, review of grammar. Taught in French.

0101	Mercedes Baillargeon TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE

FREN399 **Directed Study in French**

(Perm req)

Credits: 1-3 Grading Method: Regular

Advanced undergraduates develop syllabus, reading list, and course requirements with interested faculty member. Designed for in-depth study of material not offered in regular courses or as expansion of course material. To be planned during semester preceding registration.

Supervised work under professor of student's choice with permission of instructor. Contact department for details.

Contact department for information to register for this course.

FREN399A **Directed Study in French**

Credits: 3 Grading Method: Regular

Advanced undergraduates develop syllabus, reading list, and course requirements with interested faculty member. Designed for in-depth study of material not offered in regular courses or as expansion of course material. To be planned during semester preceding registration.

Contact department for information to register for this course.

FREN421 **Francophone African Film**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU, DVUP

Cross-listed with: CINE421. Credit only granted for: FREN421, CINE421 or FILM421. Formerly: FILM421.

Imaginary and Memory in the reality of Francophone African Film from 1960-present. Taught in English.

0101	Valerie Orlando TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE

FREN472 **The Construction of French Identity II: From the Revolution to the Early Twentieth Century**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN387; or permission of ARHU-French & Italian Languages & Literatures department.

French life, customs, culture, traditions (1750 to the early twentieth century).

0101	Sarah Benharrech MW 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

FREN495H **Honors Thesis Research**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be admitted to the departmental honors program.

The writing of a paper under the direction of a professor in this department and an oral examination. Required to fulfill the departmental honors requirement.

Contact department for information to register for this course.

FREN498G **Special Topics in French Literature; Gender and Identity in Film and Literature of the French-Speaking World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics in French literature.

Prerequisite: FREN 301 and FREN 351 or FREN 352. This course encourages students to engage with a wide variety of materia ls (literary texts, films, newspaper articles, podcasts etc) order to ex plore the constructions of gender, race, ethnicity and identity in conte mporary France and the French-speaking world. Taught in French.

0101	Valerie Orlando TuTh 3:30pm - 4:45pm	Seats (Total: 25) ONLINE

FREN499 **Special Topics in French Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An aspect of French studies, the specific topic to be announced each time the course is offered.

Contact department for information to register for this course.

FREN499X **Special Topics in French Studies; Directed Study in French**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An aspect of French studies, the specific topic to be announced each time the course is offered.

Contact department for information to register for this course.

FREN699W **Seminar; Transatlantic Mirror: French Writers look at America and the United Stats, 16th Century to 21st Century**

Credits: 3 Grading Method: Regular, Audit

Topic to be determined each semester.

Restricted to FRIT and FRMS graduate students unless permission granted by instructor. Study of the various ways in which French writers have described America and the United States since the discovery of the "New World." Particular attention will be paid to the political and sociological implications of their narratives, as well as to their invention of a continent and nation that constitutes a "cultural mirror." Readings will include works by Jean de Lery, Alexis de Tocqueville, Gustave de Beaumont, J.J. Servan-Schreiber, Simone de Beauvoir, J.F. Revel, Thomas Snegaroff.

0101	Herve Campangne M 4:30pm - 7:15pm	Seats (Total: 10) ONLINE

FREN699Z **Seminar; Women's Writing in France 20th/21st**

Credits: 3 Grading Method: Regular, Audit

Topic to be determined each semester.

Restricted to FRIT and FRMS graduate students unless permission granted by instructor.

0101	Mercedes Baillargeon W 5:00pm - 7:30pm Class time/details on ELMs	Seats (Total: 5) JMZ 1205 ONLINE
0201	Mercedes Baillargeon Class time/details on ELMs	Seats (Total: 5) ONLINE

FREN709 **College Teaching of French**

Credits: 1 Grading Method: Sat-Fail

Introduction to the teaching of French at the college level with particular emphasis on methodology. Seminars in theory, demonstration of different teaching techniques, supervised practice teaching, training in language laboratory procedures, evaluation of instructional materials. Required of all graduate assistants in French.

Restricted to FRIT and FRMS graduate students unless permission granted by instructor.

0101	Mary Ellen Scullen F 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 5) JMZ 1205 ONLINE

FREN798 **Master's Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

FREN799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

FREN889 **Doctoral Independent Study**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

FREN898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

FREN899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

GEMS Gemstone Fall 2020

GEMS100 **Freshman Honors Colloquium: Introduction to Gemstone**

Credits: 1 Grading Method: Regular

Restriction: Freshman standing; and must be in the Gemstone program.

Orienting new Gemstone students to the university and to the program through a variety of team building activities, resources, and skill exploration exercises. Students will also examine and discuss areas such as liberal education, diversity, service, arts, current events, academic integrity, and leadership style.

0101	Leah Kreimer Tobin Tu 11:00am - 12:15pm	Seats (Total: 10) ONLINE
0102	Leah Kreimer Tobin Tu 2:00pm - 3:15pm	Seats (Total: 10) ONLINE
0103	Leah Kreimer Tobin Tu 3:45pm - 5:00pm	Seats (Total: 10) ONLINE
0104	Leah Kreimer Tobin W 10:00am - 11:15am	Seats (Total: 10) ONLINE
0105	Leah Kreimer Tobin W 12:30pm - 1:45pm	Seats (Total: 10) ONLINE
0106	Leah Kreimer Tobin W 3:30pm - 4:45pm	Seats (Total: 10) ONLINE
0107	Leah Kreimer Tobin W 4:45pm - 6:00pm	Seats (Total: 10) ONLINE
0108	Leah Kreimer Tobin Th 9:30am - 10:45am	Seats (Total: 10) ONLINE
0109	Leah Kreimer Tobin Th 12:30pm - 1:45pm	Seats (Total: 10) ONLINE
0110	Leah Kreimer Tobin Th 2:00pm - 3:15pm	Seats (Total: 10) ONLINE
0111	Leah Kreimer Tobin Th 5:00pm - 6:15pm	Seats (Total: 10) ONLINE
0112	Leah Kreimer Tobin F 10:30am - 11:45am	Seats (Total: 10) ONLINE
0113	Leah Kreimer Tobin F 1:30pm - 2:45pm	Seats (Total: 10) ONLINE
0114	Leah Kreimer Tobin Tu 12:30pm - 1:45pm	Seats (Total: 10) ONLINE

GEMS202 **Team Dynamics and Research Methodology**

Credits: 2 Grading Method: Regular General Education: DSSP

Prerequisite: GEMS100, GEMS102, and GEMS104. Corequisite: GEMS296. Restriction: Must be in the Gemstone program; and sophomore standing or higher.

This experiential course is designed to foster an understanding of effective team dynamics and basic research methodology. It will teach skills applicable to Gemstone team research and the writing of a team thesis. Upperclass Gemstone students serve as discussion facilitators. Students participate in their Gemstone teams and develop a draft of their team thesis proposal.

0101	Kristan Skendall	Seats (Total: 168)	
	Tu 5:00pm - 6:30pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

GEMS208A **Special Topics in Leadership and Team Development; Team Dynamics and Research Methodology: First Time Section Leader**

Credits: 1-3 Grading Method: Regular

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program.

0101	Kristan Skendall	Seats (Total: 14)
	Class time/details on ELMs	ONLINE

GEMS208B **Special Topics in Leadership and Team Development; Team Dynamics and Research Methodology: Returner Section Leader**

Credits: 1-3 Grading Method: Regular

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program.

0101	Kristan Skendall	Seats (Total: 14)
	Class time/details on ELMs	ONLINE

GEMS208C **Special Topics in Leadership and Team Development; Introduction to Gemstone: First Time Section Leader**

Credits: 1-3 Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program. These classes are scheduled in the Ellicott building.

0101	Kristan Skendall, Leah Kreimer Tobin	Seats (Total: 23)
	Class time/details on ELMs	ONLINE

GEMS208D **Special Topics in Leadership and Team Development; Introduction to Gemstone: Returner Section Leader**

Credits: 1-3 Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program. These classes are scheduled in the Ellicott building.

0101	Kristan Skendall, Leah Kreimer Tobin	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

GEMS208J **Special Topics in Leadership and Team Development; Gems Camp**

Credits: 1-3 Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Jessica Lee	Seats (Total: 24)
	Class time/details on ELMs	ONLINE

GEMS208K **Special Topics in Leadership and Team Development; GEMS Connect**

Credits: 1-3

Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program.

0101	Jessica Lee	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

GEMS208M **Special Topics in Leadership and Team Development; AMPP: The Gemstone Alumni Mentor & Partner Program**

Credits: 1-3

Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Leah Kreimer Tobin	Seats (Total: 100)
	Class time/details on ELMs	ONLINE

GEMS208P **Special Topics in Leadership and Team Development; Gemstone Leadership Council**

Credits: 1-3

Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Jessica Lee	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

GEMS208Q **Special Topics in Leadership and Team Development; Facilitator TA**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Kristan Skendall	Seats (Total: 2)
	Class time/details on ELMs	ONLINE

GEMS208R **Special Topics in Leadership and Team Development; Gemstone Equity-Centered Dialogue Facilitation**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Kristan Skendall	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

GEMS296 **Team Project Seminar I**

Credits: 1 Grading Method: Regular

Prerequisite: GEMS100, GEMS102, and GEMS104. Corequisite: GEMS202. Restriction: Must be in the Gemstone program with sophomore standing in a research team.

This is the first of six seminars during which Gemstone students carry out multidisciplinary research with the guidance of a faculty mentor. The teams develop their working relationship, start their literature search, define their research question, and set short & long term goals.

0101	Anil Deane	Seats (Total: 14)
	Th 3:30pm - 4:30pm	ONLINE
	W 7:00pm - 7:50pm	ONLINE
0102	Mohamad Al-Sheikhly	Seats (Total: 14)
	Class time/details on ELMs Contact instructor or department for details.	ONLINE
0103	Steve Sin	Seats (Total: 14)
	WTh 6:00pm - 6:50pm	ONLINE

0104	Jose Aranda-Espinoza M 8:00am - 8:50am Th 8:00pm - 8:50pm	Seats (Total: 14) ONLINE ONLINE
0105	Ray Sedwick Class time/details on ELMs	Seats (Total: 14) ONLINE
0106	David Akin Class time/details on ELMs	Seats (Total: 14) ONLINE
0107	Yanjin Zhang Class time/details on ELMs	Seats (Total: 14) ONLINE
0108	Richard Blanton W 6:00pm - 6:50pm F 5:30pm - 6:20pm	Seats (Total: 14) ONLINE ONLINE
0109	Jae Kun Shim Class time/details on ELMs	Seats (Total: 14) ONLINE
0110	Mary Beth Furst M 3:00pm - 3:50pm W 7:00pm - 7:50pm	Seats (Total: 14) ONLINE ONLINE
0111	Younggeon Jin Class time/details on ELMs	Seats (Total: 14) ONLINE
0113	Kristan Skendall Class time/details on ELMs	Seats (Total: 5) ONLINE

GEMS297 **Team Project Seminar II**

Credits: 2 Grading Method: Regular

Restriction: Must be in the Gemstone program with sophomore standing in a research team.

This is the second of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team develops its website, prepares and presents its research proposal and begins its research project.

0113	Kristan Skendall Class time/details on ELMs	Seats (Total: 5) ONLINE

GEMS396 **Team Project Seminar III**

Credits: 2 Grading Method: Regular

Prerequisite: GEMS297. Restriction: Must be in the Gemstone program with junior standing in a research team.

This is the third of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team presents its progress at the Gemstone Colloquia.

0101	J Carson Smith Tu 7:00pm - 7:50pm Su 7:00pm - 7:50pm	Seats (Total: 14) ONLINE ONLINE
0102	Steven Mitchell Th 8:00am - 8:50am M 5:00pm - 5:50pm	Seats (Total: 14) ONLINE ONLINE
0103	Kan Cao Class time/details on ELMs	Seats (Total: 14) ONLINE
0104	Mona Mittal Class time/details on ELMs	Seats (Total: 14) ONLINE
0105	Stephanie Yarwood TuTh 10:00am - 10:50am	Seats (Total: 14) ONLINE
0106	Siddhartha Das F 4:00pm - 4:50pm Tu 8:00am - 8:50am	Seats (Total: 14) ONLINE ONLINE
0107	Pierre-Emmanuel Jabin F 2:00pm - 2:50pm Th 6:30pm - 7:20pm	Seats (Total: 14) EGR 0108 EGR 0108
0108	John Baras Class time/details on ELMs	Seats (Total: 14) ONLINE
0109	Mohamad Al-Sheikhly M 6:30pm - 7:20pm Tu 8:00am - 8:50am	Seats (Total: 14) SYM 0200 SYM 0200

0110	Romel Gomez Th 6:00pm - 8:00pm	Seats (Total: 14) Location: TBA
0111	Anil Deane M 5:00pm - 5:50pm M 1:30pm - 3:00pm	Seats (Total: 14) ONLINE ONLINE
0112	Rodolphe Gentili Su 2:00pm - 4:50pm	Seats (Total: 14) ONLINE
0113	Kristan Skendall Class time/details on ELMs	Seats (Total: 5) ONLINE

GEMS397 **Team Project Seminar IV**

Credits: 2 Grading Method: Regular

Prerequisite: GEMS396. Restriction: Must be in the Gemstone program with junior standing in a research team.

This is the fourth of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team further develops its website. Also they will prepare and present the team project in the poster session of Undergraduate Research Day.

0113	Kristan Skendall Class time/details on ELMs	Seats (Total: 5) ONLINE

GEMS496 **Project Writing Seminar**

Credits: 2 Grading Method: Regular

Prerequisite: GEMS397. Restriction: Must be in the Gemstone program.

This is the fifth of six seminars during which Gemstone students carry out research with the guidance of a faculty mentor. The team finishes the analysis of their data and writes and edits its team thesis.

0101	Nishanth Sunny Class time/details on ELMs	Seats (Total: 14) ONLINE
0102	Anil Deane W 5:00pm - 5:50pm M 5:00pm - 5:50pm	Seats (Total: 14) ONLINE ONLINE

0103	Natasha Andrade Class time/details on ELMs	Seats (Total: 14) ONLINE
0104	Giuliano Scarcelli Th 5:30pm - 6:20pm M 6:30pm - 7:20pm	Seats (Total: 14) ONLINE ONLINE
0105	Kenneth Frauwirth Class time/details on ELMs	Seats (Total: 14) ONLINE
0106	Bryan Quinn TuTh 8:15am - 9:05am	Seats (Total: 14) ONLINE
0107	David Akin, Mary Bowden Th 4:30pm - 5:20pm Tu 4:30pm - 5:30pm	Seats (Total: 14) ONLINE ONLINE
0108	Doug Lombardi Th 3:45pm - 5:25pm	Seats (Total: 14) ONLINE
0109	Jae Kun Shim M 12:45pm - 1:35pm W 8:00am - 8:50am	Seats (Total: 14) ONLINE ONLINE
0110	Birthe Kjellerup Class time/details on ELMs	Seats (Total: 14) ONLINE
0111	Soheil Feizi Class time/details on ELMs	Seats (Total: 14) ONLINE
0112	Peter Kofinas Tu 8:00am - 8:50am Th 8:00am - 8:50am	Seats (Total: 14) ONLINE ONLINE
0113	Kristan Skendall Class time/details on ELMs	Seats (Total: 3) ONLINE

GEMS497 **Team Thesis Defense**

Credits: 2 Grading Method: Regular General Education: DSSP

Prerequisite: GEMS396. Restriction: Must be in the Gemstone program.

Gemstone teams will complete the team research project and thesis. The team will formally present the thesis to experts in the area of interest at a Team Thesis Conference before final submission.

0113	Kristan Skendall	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

GEOG Geographical Sciences Fall 2020

GEOG110 **The World Today: Global Perspectives**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

The most critical issue facing the world today is the sustainability of both human and physical systems in the 21st century. This class uses the context of regions of the world to explore the 21st century issues of climate change, development, politics, economy, and demography. Each region will be used to highlight aspects of sustainability.

FC01	Rachel Berndtson	Seats (Total: 40)
	MW 4:30pm - 5:45pm	ONLINE
	Restricted to students in Freshmen Connection.	

GEOG140 **Natural Disasters: Earthquakes, Floods, and Fires**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS, SCIS

Catastrophic Environmental Events (CCE) that are becoming more common in this time of global environmental change and it is essential that today's students be equipped with the knowledge and skills to be leaders as we, as a society, understand the upheaval that these CCEs are causing. Students will examine how CEEs shape human society and ecosystem from the interdisciplinary perspective afforded by the field of Geography. Students will use the latest geographic science concepts and techniques in exploring these events. Using satellite imagery they will gain a multi-scale perspective of the ecological and societal aspects of the events.

0101	Keith Yearwood	Seats (Total: 25)	
	Class time/details on ELMs F 9:00am - 9:50am	ONLINE ONLINE	Discussion
0102	Keith Yearwood	Seats (Total: 25)	
	Class time/details on ELMs F 10:00am - 10:50am	ONLINE ONLINE	Discussion

0103	Keith Yearwood Class time/details on ELMs Th 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0104	Keith Yearwood Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0105	Keith Yearwood Class time/details on ELMs Th 9:30am - 10:20am	Seats (Total: 25) ONLINE ONLINE	Discussion
0106	Keith Yearwood Class time/details on ELMs Th 9:30am - 10:20am	Seats (Total: 25) ONLINE ONLINE	Discussion
0201	Keith Yearwood Class time/details on ELMs Th 9:30am - 10:20am	Seats (Total: 25) ONLINE ONLINE	Discussion
0202	Keith Yearwood Class time/details on ELMs Th 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0203	Keith Yearwood Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0204	Keith Yearwood Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
FC01	Keith Yearwood Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 48) ONLINE	

GEOG170 **Mapping our Digital World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: MS | General Education: DSNS

Introduction to technical methods used in gathering, analyzing, and mapping geospatial information for applications such as urban mobility, environmental monitoring, situational awareness, and disaster management. Topics include Geographic Information Systems (GIS), cartography, map projections, satellite and airborne remote sensing, the global positioning system (GPS), and introductory statistics and probability. The course is a gateway to more advanced technical classes in geospatial science.

0101	Micah Brachman	Seats (Total: 150)	
	Class time/details on ELMs	ONLINE	

GEOG201 **Geography of Environmental Systems**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with GEOG211)

A systematic introduction to the processes and associated forms of the atmosphere and earth's surfaces emphasizing the interaction between climatology, hydrology and geomorphology.

0101	Amanda Hall	Seats (Total: 240)	
	TuTh 12:30pm - 1:45pm	ONLINE	

GEOG211 **Geography of Environmental Systems Laboratory**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in GEOL120, GEOL100, or GEOG201.

A laboratory course to accompany GEOG 201. Analysis of the components of the earth's energy balance using basic instrumentation; weather map interpretation; soil analysis; the application of map and air photo interpretation techniques to landform analysis.

This is a 2 hr, 1 credit lab which parallels GEOG 201; Required for GEOG majors; optional for non-majors.

0101	Amanda Hall, Baobao Liu	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0201	Amanda Hall, Baobao Liu	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0301	Baobao Liu, Amanda Hall	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0401	Baobao Liu, Amanda Hall	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab

0501	Amanda Hall, Baobao Liu Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0601	Amanda Hall, Kirsten Ilustre Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0701	Kirsten Ilustre, Amanda Hall Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0801	Kirsten Ilustre, Amanda Hall Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0901	Valeria Morales, Amanda Hall Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
1001	Valeria Morales, Amanda Hall Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab

GEOG276 **Principles of Python Programming for Social and Environmental Sciences**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduces conceptual and practical aspects of scientific computing using the Python programming language. The main focus is on developing proficiency for the basic elements of the development environment, foundational syntax including variables, logical operators, looping, conditional statements, nesting, and common programming patterns for mathematical and textual computing. In addition, essential data structures and functionality for scientific computing, such as arrays, dataframes, and data visualization will be introduced. Throughout the course, students will also become exposed to various applications in the domain of the social and environmental sciences.

0101	Taylor Oshan MW 1:00pm - 1:50pm W 2:00pm - 3:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion
0102	Taylor Oshan MW 1:00pm - 1:50pm W 2:00pm - 3:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion

GEOG330 **As the World Turns: Society and Sustainability in a Time of Great Change**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP, SCIS

Credit only granted for: GEOG330, GEOG360, or GEOG362. Formerly: GEOG362.

Cultural geography course on society and sustainability. Culture is the basic building block that is key to sustainability of societies. Course will cover sustainability of societies on different scales, examining local, regional, and worldwide issues. Sustainability will be examined as a key element of environmental sustainability. How societies adjust to rapid world change will be examined as a positive and/or negative factor in sustainability.

0101	Rachel Berndtson MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Rachel Berndtson MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Rachel Berndtson MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0104	Rachel Berndtson MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0105	Rachel Berndtson MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0106	Rachel Berndtson MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

GEOG332 **Economic Geography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: GEOG203, GEOG303, or GEOG332. Formerly: GEOG303.

Principles of managing scarce resources in a world where everyone faces tradeoffs across both time and space. Focuses on the relationship between globalization processes and changing patterns of locational advantages, production, trade, population, socioeconomic and environmental grace and sustainability.

0101	Julie Silva	Seats (Total: 25)	
	MW 2:00pm - 2:50pm F 10:00am - 10:50am	ONLINE ONLINE	Discussion
0102	Julie Silva	Seats (Total: 25)	
	MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	ONLINE ONLINE	Discussion

GEOG372 **Remote Sensing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Principles of remote sensing in relation to photographic, thermal infrared and radar imaging. Methods of obtaining quantitative information from remotely-sensed images. Interpretation of remotely-sensed images emphasizing the study of spatial and environmental relationships.

Students must pay a $40.00 laboratory materials fee.

0101	Sergii Skakun	Seats (Total: 25)	
	MW 9:00am - 9:50am F 11:00am - 12:50pm	ONLINE ONLINE	Lab
0102	Sergii Skakun	Seats (Total: 25)	
	MW 9:00am - 9:50am F 11:00am - 12:50pm	ONLINE ONLINE	Lab
	Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.		
0103	Sergii Skakun	Seats (Total: 25)	
	MW 9:00am - 9:50am Th 11:00am - 12:50pm	ONLINE ONLINE	Lab
0104	Sergii Skakun	Seats (Total: 25)	
	MW 9:00am - 9:50am Th 11:00am - 12:50pm	ONLINE ONLINE	Lab

GEOG373 **Geographic Information Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Characteristics and organization of geographic data; creation and use of digital geospatial databases; metadata; spatial data models for thematic mapping and map analysis; use of geographic information system in society, government, and business. Practical training with use of advanced software and geographic databases.

Students must pay a $40.00 laboratory materials fee.

0101	Naijun Zhou	Seats (Total: 25)	
	MW 10:00am - 10:50am	ONLINE	
	F 9:00am - 11:00am	ONLINE	Lab
	Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.		
0102	Naijun Zhou	Seats (Total: 25)	
	MW 10:00am - 10:50am	ONLINE	
	F 1:00pm - 2:50pm	ONLINE	Lab
0103	Naijun Zhou	Seats (Total: 25)	
	MW 10:00am - 10:50am	ONLINE	
	F 3:00pm - 4:50pm	ONLINE	Lab

GEOG384 **Internship in Geography I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and (ENGL393 or ENGL390). Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional level activities, demands, opportunities. Placement at a public agency, non-profit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Keith Yearwood	Seats (Total: 25)
	Contact instructor or department for details.	

GEOG384H **Internship in Geography I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and (ENGL393 or ENGL390). Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional level activities, demands, opportunities. Placement at a public agency, non-profit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Keith Yearwood	Seats (Total: 10)
	Contact instructor or department for details.	

GEOG385 **Internship in Geography II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and must have completed a Junior (Professional) English course. Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional-level activities, demands, opportunities. Placement at a public agency, nonprofit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Keith Yearwood	Seats (Total: 25)
	Contact instructor or department for details.	

GEOG385H **Internship in Geography II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and must have completed a Junior (Professional) English course. Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional-level activities, demands, opportunities. Placement at a public agency, nonprofit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Keith Yearwood	Seats (Total: 10)
	Contact instructor or department for details.	

GEOG398 **Special Topics in Geography**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An introductory course dealing with special topics in geography.

Contact department for information to register for this course.

GEOG398H **Special Topics in Geography**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

An introductory course dealing with special topics in geography.

0101	Instructor: TBA	Seats (Total: 1)
	Contact instructor or department for details.	

GEOG398P **Special Topics in Geography; Programming for Image Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introductory course dealing with special topics in geography.

Introduces application programming interface (API) functions and image processing techniques for efficient processing of satellite images. The main programing language of the course is Python. The course will use a Geospatial Data Abstraction Library (GDAL) which provides a unified way of manipulating images incorporating geospatial information. For image image processing, the course will use Python-based libraries such as scikit-image and OpenCV.

0101	Ritvik Sahajpal	Seats (Total: 25)
	TuTh 9:30am - 10:45am	ONLINE

GEOG431 **Culture and Natural Resource Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: GEOG421 or GEOG431. Formerly: GEOG421.

Basic issues concerning the natural history of humans from the perspective of the geographer. Basic components of selected behavioral and natural systems, their evolution and adaptation, and survival strategies.

0101	Kuishuang Feng	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

GEOG432 **Spatial Econometrics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of BSOS-Geography department. Or GEOG201; and GEOG202; and GEOG306; and GEOG332. Jointly offered with GEOG732. Credi t only granted for: GEOG498E, GEOG432, GEOG788E, GEOG732. Formerly: GEOG498E.

An introduction to modern econometric techniques in general and spatial econometrics in particular, using the popular open source statistical computer language R. A focus on using statistical computing to produce analytical reports for real-world applications, research papers, and dissertations.

0101	Laixiang Sun	Seats (Total: 24)
	Tu 3:30pm - 6:00pm	ONLINE

GEOG442 **Biogeography and Environmental Change**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG301. And GEOG201 and GEOG211; or permission of BSOS-Geography department. Jointly offered with GEOG642. Credit only granted for: GEOG642, GEOG442, GEOG447, or GEOG484. Formerly: GEOG4 47.

Biogeographical topics of global significance, including a consideration of measurement techniques, and both descriptive and mechanistic modeling. Topics may include: scale in biogeography, biodiversity, carbon geography, climate and vegetation, interannual variability in the biosphere, land cover, global biospheric responses to climate change, NASA's Mission to Planet Earth and Earth Observation System. The class focuses on both natural and athropogenic controls, impacts of biography on climate and ecosystem services and different methods in biogeography.

0101	George Hurtt	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

GEOG471 **Technologies for Computational Earth Observations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG371.

Introduction and exploration of remote sensing datasets that are not emphasized in existing GEOG computational classes. Emphasis on the strengths and limitations of each technology for various applications in science and resource management (e.g. forestry, agriculture, cryosphere). Fusion techniques, product calibration and validation, and common processing pitfalls will be presented. Hands-on computer labs will allow students to explore each dataset and work toward a unique student-driven project using one or several data sources.

0101	Laura Duncanson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

GEOG475 **Computer Cartography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG373 and GEOG306. Credit only granted for: GEOG471 or GEOG475. Formerly: GEOG471.

An overview of the basic concepts and techniques that underlie digital map making and the broader field of geographic visualization for intermediate GIS users. This includes the use of color, map symbolization, map layout, and also the contribution to geographic visualization from the fields of scientific visualization, information visualization, and cognition. Fundamentals of dynamic map design and web mapping will be introduced through the use of animated and interactive maps.

Students must pay a $40.00 laboratory materials fee.

0101	Kathleen Stewart	Seats (Total: 24)	
	MW 3:00pm - 3:50pm	ONLINE	
	F 9:00am - 10:50am	ONLINE	Lab
0102	Kathleen Stewart	Seats (Total: 24)	
	MW 3:00pm - 3:50pm	ONLINE	
	F 1:00pm - 2:50pm	ONLINE	Lab
	Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.		

GEOG498 **Topical Investigations**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent study under individual guidance.

Contact department for information to register for this course.

GEOG498D **Topical Investigations; Biophysics of Optical Remote Sensing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent study under individual guidance.

Biophysical principles, phenomena and processes underlying multispectral remote sensing in the optical portion of the EM spectrum. Includes computer-based exercises that explore the biophysical basis of land patterns and dynamics observed in remote sensing data.

0101	Shunlin Liang	Seats (Total: 24)
	W 4:00pm - 6:30pm	ONLINE

GEOG498G **Topical Investigations; Models and Methods for Spatial Data Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent study under individual guidance.

Introduces a spatial data science (SDS) framework for uncovering spatial patterns and understanding spatial processes, whether they are generated by humans, the physical environment, or a combination thereof. This course first covers some basic principles of popular computational tools for SDS and then surveys a variety of geographic conceptual models and quantitative methods from the traditions of spatial analysis and spatial statistics. A strong emphasis is placed on the practical deployment of these models and methods and their interpretation. Students will develop expertise in common design decisions, analytical intuition, and limitations of SDS through real world examples and applied projects, as well as build their repertoire of Python programming skills for obtaining, processing, and analyzing spatial data.

0101	Taylor Oshan	Seats (Total: 18)	
	MW 2:00pm - 2:50pm	ONLINE	
	Th 1:00pm - 2:50pm	ONLINE	Lab

GEOG603 **Masters Research Tutorial**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: GEOG600. Restriction: Permission of BSOS-Geography department. Credit only granted for: GEOG603 or GEOG610. Formerly: GEOG610.

Development of Masters scholarly paper topic, critical literature review, formulation of geographical approach to research methodology. Individual meetings with faculty. Comprehensive exam before the end of the semester.

Contact department for information to register for this course.

GEOG608 **Comprehensive Portfolio Assessment Summary**

Credits: 1-3 Grading Method: Sat-Fail

Evaluation of a PhD student's portfolio.

Contact department for information to register for this course.

GEOG642 **Biogeography and Environmental Change**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of BSOS-Geography department. Jointly offered w ith GEOG442. Credit only granted for: GEOG788C, GEOG642, or GEOG442. Formerly: GEOG788C.

Biogeographical topics of global significance, including a consideration of measurement techniques, and both descriptive and mechanistic modeling. Topics may include: scale in biogeography, biodiversity, carbon geography, climate and vegetation, interannual variability in the biosphere, land cover, global biospheric responses to climate change, NASA's Mission to Planet Earth and Earth Observation System. The class focuses on both natural and athropogenic controls, impacts of biography on climate and ecosystem services and different methods in biogeography.

0101	George Hurtt	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

GEOG652 **Digital Image Processing and Analysis**

Credits: 3 Grading Method: Regular

Prerequisite: GEOG579 or GEOG506; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Geospatial Information Sciences (Master's) program; or must be in the Geospatial Information Sciences (Graduate Certificate) program.

Digital image processing and analysis applied to satellite and aircraft land remote sensing data. Consideration is given to preprocessing steps including calibration and geo registration. Analysis methods include digital image exploration, feature extraction thematic classification, change detection, and biophysical characterization. One or more application examples may be reviewed.

Students must pay a $40 lab fee.

PLG1	Naijun Zhou	Seats (Total: 30)	
	Meets August 31, 2020 - November 20, 2020		
	W 6:30pm - 9:00pm	ONLINE	
	Th 6:30pm - 9:00pm	ONLINE	Lab
	Must be in Geospatial Information Sciences Program. For permission to enroll, contact oes@umd.edu.		
PLG2	Rejanne Le Bivic	Seats (Total: 15)	
	Meets August 31, 2020 - November 20, 2020		
	Tu 10:00am - 12:25pm	ONLINE	
	Tu 12:30pm - 3:00pm	ONLINE	Lab
	Must be in Geospatial Information Sciences Program. For permission to enroll, contact oes@umd.edu. Section open to NOAA cohort.		

GEOG653 **Spatial Analysis**

Credits: 3 Grading Method: Regular

Prerequisite: GEOG579 or GEOG506; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Geospatial Information Sciences (Master's) program; or must be in the Geospatial Information Sciences (Graduate Certificate) program.

Methods of spatial analysis including measuring aspects of geometric features and identifying spatial patterns of geospatial objects that are represented as point, line, network, areal data, and 3-D surfaces.

Students must pay a $40 lab fee.

PLG1	Jianguo Ma	Seats (Total: 45)	
	Meets August 31, 2020 - November 20, 2020		
	M 5:30pm - 8:00pm	ONLINE	
	Tu 5:30pm - 7:30pm	ONLINE	Lab
	Must be in Geospatial Information Sciences Program. For permission to enroll, contact oes@umd.edu.		

GEOG654 GIS and Spatial Modeling

Credits: 3 Grading Method: Regular

Prerequisite: GEOG653. Restriction: Must be in Geospatial Information Sciences (Master's) program; or must be in Graduate Certificate: Professional Studies-Geospatial Information Sciences.

Provide foundations and understanding on various issues related to modeling and simulation in GIS context. It will addresses the concepts, tools, and techniques of GIS modeling, and presents modeling concepts and theory as well as provides opportunities for hands-on model design, construction, and application. The focus will be on raster-based modeling. This course is also application-orientated, particularly in these fields such as terrain modeling, LULC modeling, hydrological modeling, suitability modeling, etc.

Students must pay a $40.00 lab fee.

PLG1	Jonathan Resop	Seats (Total: 20)	
	Meets August 31, 2020 - November 20, 2020		
	M 5:30pm - 8:00pm	ONLINE	
	Tu 5:30pm - 8:00pm	ONLINE	Lab
	Must be in Geospatial Information Sciences Program. For permission to enroll, contact oes@umd.edu.		

GEOG656 Programming and Scripting for GIS

Credits: 3 Grading Method: Regular

Prerequisite: GEOG653. Restriction: Must be in Geospatial Information Sciences (Master's) program; or must be in Graduate Certificate: Professional Studies-Geospatial Information Sciences.

Programming and scripting for intermediate GIS users. The fundamental concepts of computer programming will be introduced within the Geoprocessing framework in ArcGIS primarily using Python. Concepts of object-oriented programming and scripting will be presented. Students will develop skills in programming techniques to explore, manipulate and model spatial data using the Geoprocessor methods.

Contact department for information to register for this course.

GEOG661 **Fundamentals of Geospatial Intelligence**

Credits: 3 Grading Method: Regular

Geospatial Intelligence (GEOINT) is the collection, analysis, visualization and dissemination of geospatial information to support decision-making. This course introduces the fundamental knowledge required to become a successful GEOINT practitioner, including the history of the GEOINT discipline, the intelligence applications of remote sensing and Geographic Information Systems (GIS) technologies, and how GEOINT products are used to support national security and humanitarian missions. Upon completion of this course you will understand the roles that technology, policy, doctrine, government, and industry play in shaping the Geospatial Intelligence discipline, and develop the technical knowledge and domain expertise to create basic GEOINT products that provide context for decision makers.

PLG1	Micah Brachman	Seats (Total: 15)	
	Meets August 31, 2020 - November 20, 2020		
	W 5:30pm - 8:00pm	ONLINE	
	Th 5:30pm - 8:00pm	ONLINE	Lab
	Must be in Geospatial Information Sciences Program. For permission to enroll, contact oes@umd.edu.		
PLI1	Micah Brachman	Seats (Total: 15)	
	Meets August 31, 2020 - November 20, 2020		
	W 5:30pm - 8:00pm	ONLINE	
	Th 5:30pm - 8:00pm	ONLINE	Lab
	Must be in Geospatial Intelligence Program. For permission to enroll, contact oes@umd.edu.		

GEOG662 **Advances in GIS and Remote Sensing**

Credits: 3 Grading Method: Regular, Audit

Restriction: Students taking the course must be familiar with data structures, basic GIS and RS concepts, and demonstrate basic understanding of using GIS and RS software. And must be enrolled in Geographical Sciences MPS or graduate certificate program; or permission of BSOS-Geography department.

Focuses on state-of-the-art advances in geographic information science and remote sensing as they support geospatial intelligence. Focus on synergies between GIS and remote sensing in informatics, computer science, and spatial engineering, and their application to problem domains in human systems, physical systems, and cyberspace. Advances in GIS presents recent advances regarding fundamental issues of geo-spatial information science (space and time, spatial analysis, uncertainty modeling and geo-visualization), and new scientific and technological research initiatives for geo-spatial information science (such as spatial data mining, mobile data modeling, and location-based services). Advances in remote sensing will provide opportunity to understand and work with latest developments in the Remote Sensing datasets. The curriculum covers wide range of remote sensing data interpretation and their processing techniques.

PLI1	Ruibo Han	Seats (Total: 15)	
	Meets August 31, 2020 - November 20, 2020		
	M 5:30pm - 8:00pm	ONLINE	
	Tu 5:30pm - 8:00pm	ONLINE	Lab
	Must be in Geospatial Intelligence Program. For permission to enroll, contact oes@umd.edu.		

GEOG672 **Biophysics of Optical Remote Sensing**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: GEOG472; or students who have taken courses with comparable content may contact the department; or permission of BSOS-Geography department.

Biophysical principles, phenomena and processes underlying multispectral remote sensing in the optical portion of the EM spectrum. Includes computer-based exercises that explore the biophysical basis of land patterns and dynamics observed in remote sensing data.

0101	Shunlin Liang	Seats (Total: 24)	
	W 4:00pm - 6:30pm	ONLINE	

GEOG686 **Mobile GIS and Geocomputing**

Credits: 3 Grading Method: Regular

Prerequisite: Permission of BSOS-Geography department; or must be enrolled in Geographical Sciences MPS or graduate certificate program. Recommended: Students taking the course must be familiar with data structures, basic GIS concepts, and demonstrate basic understanding of object-oriented programming under GIS environment. Credit only granted for: GEOG477, GEOG498V, GEOG788V or GEOG777. Additional information: Tablets that run android and iOS will be loaned to registered students at no cost.

An introduction to mobile GIS, to the programming concepts underlying mobile GIS development, and to the design and implementation of a mobile GIS application. Covers how to develop, test, and publish mobile GIS native apps working across two mobile platforms: Android and iOS. Leverages the capabilities of JavaScript, Swift, Google maps, ArcGIS Server and runtime SDK to developing and publishing mobile GIS apps.

PLI1	Ruibo Han	Seats (Total: 15)	
	Meets August 31, 2020 - November 20, 2020		
	W 5:30pm - 8:00pm	ONLINE	
	Th 5:30pm - 8:00pm	ONLINE	Lab
	Must be in Geospatial Intelligence Program. For permission to enroll, contact oes@umd.edu.		

GEOG732 **Spatial Econometrics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of BSOS-Geography department. Or GEOG201; and GEOG306; and GEOG202; and GEOG332. Jointly offered with GEOG432. Credi t only granted for: GEOG498E, GEOG432, GEOG788E, GEOG732. Formerly: GEOG498E, GEOG788E.

An introduction to modern econometric techniques in general and spatial econometrics in particular, using the popular open source statistical computer language R. A focus on using statistical computing to produce analytical reports for real-world applications, research papers, and dissertations.

0101	Laixiang Sun	Seats (Total: 24)
	Tu 3:30pm - 6:00pm	ONLINE

GEOG788 **Selected Topics in Geography**

(Perm req)

Credits: 1-3 Grading Method: Regular

Readings and discussion on selected topics in the field of geography.

Repeatable to 6 credits if content differs.

Contact department for information to register for this course.

GEOG788J **Selected Topics in Geography; Using Python for Data Science**

Credits: 1 Grading Method: Regular, Audit

Readings and discussion on selected topics in the field of geography.

An introduction to using Python programming language for data science tasks relevant to research and analysis for many scientific and social science domains. Focus on accomplishing data science tasks using Python libraries like Pandas and Numpy, implementing machine-learning tasks using Scikit-learn, and implementing an end-to-end automated machine learning pipeline.

0101	Ritvik Sahajpal	Seats (Total: 20)	
	Meets August 31, 2020 - October 4, 2020		
	M 5:30pm - 8:30pm	ONLINE	

GEOG788P **Selected Topics in Geography; Models and Methods for Spatial Data Science**

Credits: 3 Grading Method: Regular, Audit

Readings and discussion on selected topics in the field of geography.

Introduces a spatial data science (SDS) framework for uncovering spatial patterns and understanding spatial processes, whether they are generated by humans, the physical environment, or a combination thereof.This course first covers some basic principles of popular computational toolsfor SDS and then surveys a variety of geographic conceptual models and quantitative methods from the traditions of spatial analysis and spatialstatistics. A strong emphasis is placed on the practical deployment of these models and methods and their interpretation. Students will developexpertise in common design decisions, analytical intuition, and limitations of SDS through real world examples and applied projects, as well as build their repertoire of Python programming skills for obtaining, processing, and analyzing spatial data.

0101	Taylor Oshan	Seats (Total: 18)	
	MW 2:00pm - 2:50pm	ONLINE	
	Th 1:00pm - 2:50pm	ONLINE	Lab

GEOG788Z **Selected Topics in Geography; Topics in Data Visualization with Processing and Applications in R**

Credits: 3 Grading Method: Regular, Audit

Readings and discussion on selected topics in the field of geography.

0101	Giovanni Baiocchi	Seats (Total: 20)
	W 4:00pm - 6:30pm	ONLINE

GEOG789 **Independent Readings**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Independent reading as arranged between a graduate faculty member and graduate student.

Repeatable to 6 credits if content differs.

Contact department for information to register for this course.

GEOG790 **Internship in Geography**

Credits: 3 Grading Method: Regular, Audit

Field experience in the student's specialty in a Federal, state, or local agency or private business. Research paper required.

Contact department for information to register for this course.

GEOG797 **Professional Project**

Credits: 3 Grading Method: Regular

Prerequisite: GEOG795; and must have completed or be concurrently enrolled in ENCE662. Restriction: Must be in Geospatial Information Sciences (Master's) program.

Data and materials can originate from an internship (internal or external) or from relevant work experience with current employer. Under direction of faculty advisor, students will prepare a project report containing explanation of the requirements for the work, technical account of the activities undertaken, including literature review, description of methods and approaches taken, a critical discussion of results, along with conclusions and recommendations developed from the project. Final project will consist of a full-fledged GIS application that is up and running and can be tested, providing potential employers with a portfolio demonstrating student's ability to manage and develop a GIS application in real world situations.

Students must pay a $40 lab fee.

PLG1	Jonathan Resop, Rejanne Le Bivic **Meets August 31, 2020 - November 20, 2020** W 5:30pm - 8:00pm Th 5:30pm - 8:00pm *Must be in Geospatial Information Sciences Program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 20) ONLINE ONLINE	 Lab
PLI1	Jonathan Resop, Rejanne Le Bivic **Meets August 31, 2020 - November 20, 2020** W 5:30pm - 8:00pm Th 5:30pm - 8:00pm *Must be in Geospatial Intelligence Program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 15) ONLINE ONLINE	 Lab

GEOG798 **Selected Topics in Geography: Seminar Series; Departmental Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Readings and discussions on selected topics in the field of geography.

0101	Rachel Berndtson Th 3:45pm - 5:15pm	Seats (Total: 50) ONLINE

GEOG799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

GEOG898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

GEOG899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

GEOL Geology Fall 2020

GEOL100 Physical Geology

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with GEOL110), DSNS

Credit only granted for: GEOL100 or GEOL120. Additional information: CORE Distributive Studies Physical Science Laboratory Course only when taken concurrently with GEOL 110.

A general survey of the rocks and minerals composing the earth, its surface features and the agents that form them, and the dynamic forces of plate tectonics.

0101	Tracey Centorbi Class time/details on ELMs	Seats (Total: 99) ONLINE	
0201	Ricardo Arevalo Class time/details on ELMs	Seats (Total: 99) ONLINE	

GEOL110 Physical Geology Laboratory

Credits: 1 | Grading Method: Regular, Pass-Fail

Prerequisite: Must have completed or be concurrently enrolled in GEOL120 or GEOL100. Additional information: CORE Distributive Studies Physical Science Laboratory Course only when taken concurrently with GEOL 100.

The basic materials and tools of physical geology stressing familiarization with rocks and minerals and the use of maps in geologic interpretations.

0101	Tracey Centorbi, Goeun Ha, Karla Nunez Th 12:00pm - 3:00pm	Seats (Total: 24) ONLINE	Lab
0102	Tracey Centorbi, James Bader M 12:00pm - 3:00pm	Seats (Total: 24) ONLINE	Lab
0103	Goeun Ha, Tracey Centorbi Tu 12:00pm - 3:00pm	Seats (Total: 24) ONLINE	Lab
0104	Tracey Centorbi, Emily Chiappe Tu 3:00pm - 6:00pm	Seats (Total: 24) ONLINE	Lab
0106	Emily Chiappe, Tracey Centorbi W 9:00am - 12:00pm	Seats (Total: 24) ONLINE	Lab

0107	Tracey Centorbi, James Bader W 3:00pm - 6:00pm	Seats (Total: 24) ONLINE	Lab
0109	Karla Nunez, Tracey Centorbi Tu 9:00am - 12:00pm	Seats (Total: 24) ONLINE	Lab

GEOL120 **Environmental Geology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNL (if taken with GEOL110), DSNS

Credit only granted for: GEOL100 or GEOL120.

A review of geologic factors underlying many environmental problems and the interactions between population and physical environment: geologic hazards, land-use planning, conservation, mineral resources, waste disposal, land reclamation, and the geologic aspects of health and disease. The course is aimed at lower division students in education and liberal arts, and should be useful to any student concerned with geologic perspectives of environmental problems.

0101	Tracey Centorbi Class time/details on ELMs M 3:00pm - 3:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0102	Tracey Centorbi Class time/details on ELMs M 4:00pm - 4:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0103	Tracey Centorbi Class time/details on ELMs M 5:00pm - 5:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
FC02	Tracey Centorbi Class time/details on ELMs F 10:00am - 10:50am *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE ONLINE	Discussion

GEOL123 **Causes and Consequences of Global Change**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS, SCIS

Cross-listed with AOSC123. Credit only granted for: AOSC123, GEOG123, GEOL123, or METO123.

Study of the major components of Earth's climate system and climate change history. Discussion of 21st century climate change prediction, mitigation and adaptation efforts.

0101	Jeffrey Henrikson Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0102	Jeffrey Henrikson Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0103	Jeffrey Henrikson Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0104	Jeffrey Henrikson Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0105	Jeffrey Henrikson Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0106	Jeffrey Henrikson Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	Discussion

GEOL124 **Evolution of Life and Environment on Planet Earth**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: PS	General Education: DSNS, SCIS

An exploration of how life has shaped Earth's physical environments, both in the contemporary Earth and over the long course of Earth history. Topics range from evidence for the origin and diversification of life and its impact on Earth environments to the mind-set and methods of the scientists who interpret it, and what those methods tell us about future interactions between life and the environment, both on Earth and in the Solar System.

Restricted to students in Carillon Communities.

0101	James Farquhar TuTh 12:30pm - 1:45pm Class time/details on ELMs W 3:00pm - 3:50pm	Seats (Total: 20) ESJ 0202 ONLINE ASY 2309	Discussion

0102	James Farquhar TuTh 12:30pm - 1:45pm Class time/details on ELMs W 4:00pm - 4:50pm	Seats (Total: 20) ESJ 0202 ONLINE ASY 2309	Discussion
0103	James Farquhar TuTh 12:30pm - 1:45pm Class time/details on ELMs W 5:00pm - 5:50pm	Seats (Total: 20) ESJ 0202 ONLINE ASY 2309	Discussion

GEOL200 **Earth's Fury: Earthquakes, Volcanoes, and Tsunami**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS, SCIS

Earthquakes, volcanic eruptions, and tsunami frequently remind us of the dangers associated with living on a constantly changing planet. How do people prepare for these rare but dramatic events? Student will study the science behind earthquakes and volcanoes, how it guides monitoring, forecasting, prevention, and response, and the cultural and ethical aspects of these events.

0101	Vedran Lekic Class time/details on ELMs W 3:00pm - 3:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0102	Vedran Lekic Class time/details on ELMs W 4:00pm - 4:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0103	Vedran Lekic Class time/details on ELMs W 5:00pm - 5:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0104	Vedran Lekic Class time/details on ELMs W 3:00pm - 3:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion

GEOL212 **Planetary Geology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS

Credit only granted for: ASTR330 or GEOL212.

An examination of the geologic and geochemical processes at work in the solar system from the perspectives supplied by space age exploration of the planets and other solar system bodies.

0101	John Merck	Seats (Total: 24)	
	MWF 9:00am - 9:50am	ONLINE	

GEOL329 **Instructional Assistance Practicum**

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Undergraduate teaching assistantship in Geosciences. Individual instruction course. Contact department or instructor to obtain section number.

Contact department for information to register for this course.

GEOL331 **Principles of Paleontology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL102; or (BSCI207 or BSCI392); or permission of CMNS-Geology department. Restriction: Permission of instructor is required of non-degree seeking students. Cross-listed with BSCI333. Credit only granted for: GEOL331 or BSCI333.

A review of the theory, principles, and applications of Paleontology. A systematic overview of the morphology, evolution, and relationships of the major fossil-producing taxa.

0101	John Merck, Thomas Holtz	Seats (Total: 20)	
	TuTh 9:30am - 10:45am	ONLINE	
	Th 2:00pm - 5:00pm	GEO 2107	Lab

GEOL342 **Sedimentation and Stratigraphy**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL120 or GEOL100; and GEOL110; and GEOL322. And CHEM103; or (CHEM131 and CHEM132); or (CHEM135 and CHEM136). Restriction: Permission of instructor is required of non-degree-seeking students.

Description, origin, and distribution of sediments and sedimentary rocks.

0101	Alan Kaufman	Seats (Total: 15)	
	MWF 1:00pm - 1:50pm	BPS 1243	
	Tu 3:30pm - 6:30pm	ONLINE	Lab

GEOL351 **Statistics for Geoscientists**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH115. Restriction: Non-degree-seeking students require the permission of the instructor. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Practical approach to basic statistics applied in the geosciences. Experimental design, elementary statistics and probability, sequence analysis, spatial analysis, linear regression, nonparametric statistics, bivariate, multivariate and principal components analysis of variance, hypothesis testing. Problem sets and participatory discussion of statistical applications in the current literature.

0101	Michael Evans	Seats (Total: 16)
	M 10:00am - 12:50pm	ONLINE

GEOL375 **Introduction to the Blue Ocean**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH140. Recommended: MATH141, PHYS161, or PHYS171. Restriction: Non-degree-seeking students require the permission of the instructor. Cross-listed with AOSC375. Credit only granted for: AOSC375, GEOL375 or METO375.

Introduction to physical, chemical, and biological properties of the ocean. Role of the ocean in climate as a component of the Earth system. El Nino and the ocean, impact of global warming on the ocean and marine habitats including fisheries.

0101	James Carton	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ONLINE

GEOL393 **Geology Senior Thesis I: Proposal**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS141 and MATH141. And CHEM131 and CHEM132; or (CHEM135 and CHEM136). And must have completed at least two upper-level geology courses and be concurrently enrolled in a third. Restriction: Junior standing or higher; and must be in Geology program; and non-degree-seeking students require the permission of the instructor.

The first semester of the two-semester Geology Senior Thesis. Emphasis is on developing a plan for original research in the geosciences and presenting that plan both in writing and in public presentations that adhere to geosciences professional standards.

0101	Philip Piccoli	Seats (Total: 15)
	W 4:00pm - 6:00pm Contact instructor or department for details.	ATL 2324

GEOL394 **Geology Senior Thesis II: Research**

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

Prerequisite: GEOL393; and must have completed at least three upper level GEOL courses. Restriction: Must be in Geology program; and junior standing or higher; and in addition, non-degree-seeking students require the permission of the department.

The second semester of the two-semester Geology Senior Thesis. Investigation of specific original research question in geosciences. Emphasis is on completion of original research proposed in GEOL393 and presentation of results both in writing and in public presentations that adhere to geosciences professional standards.

Contact department for information to register for this course.

GEOL423 **Optical Mineralogy**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL100 or GEOL120; and GEOL110; and GEOL322. And CHEM131 and CHEM132; or (CHEM135 and CHEM136); or CHEM103. Restriction: Non-degree-seeking students require the permission of the instructor.

The optical behavior of crystals with emphasis on the theory and application of the petrographic microscope.

0101	Sarah Penniston-Dorland	Seats (Total: 17)	
	MWF 9:00am - 9:50am W 10:00am - 1:00pm	CCC 1205 GEO 2117	Lab

GEOL444 **Low Temperature Geochemistry**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL322, GEOL100, and MATH115. And CHEM103; or (CHEM131 and CHEM132); or (CHEM135 and CHEM136). Restriction: Non-degree-seeking students require the permission of the instructor.

Basic chemical principles, thermodynamics, and kinetics of low-temperature inorganic and organic geochemical reactions in a wide range of surface environments. These geochemical tools will be used to provide a context for understanding elemental cycling and climate change. Laboratories will include problem sets as well as wet chemical and mass spectrometric techniques used in low temperature geochemistry.

0101	James Farquhar	Seats (Total: 12)	
	TuTh 8:00am - 9:15am	BPS 1250	
	M 3:00pm - 5:45pm	ESJ 1330	Lab

GEOL446 **Geophysics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS141, MATH141, and MATH140; and (GEOL100 or GEOL120). Restriction: Non-degree-seeking students require the permission of the instructor.

An introduction to modern geophysics. Topics include: global plate tectonics, plate motion, triple junctions, geomagnetism, earthquakes and faulting, reflection and refraction seismology, gravity and isostasy, heat flow and mantle dynamics, deep interior of the Earth, geophysical observations and measurements.

0101	Wenlu Zhu	Seats (Total: 23)	
	TuTh 11:00am - 12:15pm	PHY 1410	

GEOL447 **Observational Geophysics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH140 and MATH141; and (PHYS141, PHYS161, or PHYS171).

An introduction to practical signal processing, data analysis, and inverse theory in geophysics.

0101	Vedran Lekic	Seats (Total: 20)	
	TuTh 3:30pm - 4:45pm	ONLINE	

GEOL451 **Groundwater**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL110 and MATH140; and (GEOL120 or GEOL100); and (CHEM131 and CHEM132; or (CHEM135 and CHEM136); or CHEM103). Or permission of CMNS-Geology department. Restriction: Non-degree-seeking students require the permission of the instructor; and junior standing or higher.

An introduction to the basic geologic parameters associated with the hydrologic cycle. Problems in the accumulation, distribution, and movement of groundwater will be analyzed.

0101	Wenlu Zhu	Seats (Total: 24)
	TuTh 2:00pm - 3:15pm	PHY 1410

GEOL452 **Watershed and Wetland Hydrology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Junior standing or higher; and all other students require the permission of the instructor.

Physical processes by which water moves in watershed and wetland systems. Topics include: precipitation, infiltration, flow in the unsaturated zone, streamflow generation processes, and groundwater flow.

0101	Karen Prestegaard	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	ESJ 0202

GEOL453 **Ecosystem Restoration**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH120 or MATH140; or must have completed MATH220. And (CHEM131 or CHEM135); and (CHEM132 or CHEM136); and (GEOL100, GEOL120, or ENST200). Restriction: Junior standing or higher; and permission of instructor is required of non-degree-seeking students. Credit only granted for: GEOL453 or GEOL489L. Formerly: GEOL489L.

Overview of ecosystem functions across biomes/geologic settings, and considerations and tradeoffs in ecosystem restoration strategies. Specific case studies and discussions will be aimed at understanding how structure can influence biophysical and biogeochemical processes supporting ecosystems, and then describes how rates, timing, and location of physical, chemical, and ecosystem processes can be altered by different restoration strategies to enhance ecosystem services.

Jointly offered with MEES698E and GEOL789L.

0101	Sujay Kaushal	Seats (Total: 20)
	Tu 3:30pm - 6:30pm	ARM 0135

GEOL460 **Field Geophysics**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL100 or GEOL120, MATH140, MATH141, and (PHYS141, PHYS161, or PHYS171). Restriction: Non-degree-seeking students require the permission of the instructor.

Students will become familiar with geophysical instrumentation used for both scientific and industrial applications. Students will be given an introduction to the use of geophysical instrumentation for data collection, processing, and analysis, design of field experiments for investigating field geophysical problems, and an introduction to the theory of instrument design and use. Instruments that will be covered include (but are not limited to): broadband seismometers, geophones, ground-penetrating radar, magnetotellurics, and Global Positioning Satellites.

0101	Nicholas Schmerr	Seats (Total: 8)
	M 10:00am - 1:50pm	CHE 1215

GEOL488 **Geology Colloquium**

Credits: 1 Grading Method: Sat-Fail

Contemporary research topics and issues in geosciences are explored through the weekly Geology departmental colloquium and discussion of its contents.

0101	Megan Newcombe	Seats (Total: 30)
	F 3:00pm - 4:30pm	ONLINE

GEOL499 **Special Problems in Geology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Intensive study of a special geologic subject or technique selected after consultation with instructor. Intended to provide training or instruction not available in other courses which will aid the student's development in his or her field of major interest.

Prerequisites: GEOL100 or GEO120, GEOL110, GEOL102; or equivalent; and permission of department. In addition, non-degree-seeking students require the permission of the instructor. Intensive study of a special geologic subject or technique selected after consultation with instructor. Intended to provide training or instruction not available in other courses which will aid the student's development in his or her field of major interest.

Contact department for information to register for this course.

GEOL636 **Ecosystem Restoration**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH120 or MATH140; and (CHEM131 or CHEM135); and (CHEM132 or CHEM136); and (GEOL100, GEOL120, or ENST200). Restriction: Equal preference is given to students enrolled in GEOL, MEES, CONS, ENST, AOSC, and civil and environmental engineering graduate programs; and permission of Instructor required for non degree seeking students. Credit only granted for: GEOL453 or GEOL489L. Formerly: GEOL489L.

A further understanding of ecosystem functions across biomes/geologic settings, and developing practical applications in ecosystem restoration strategies through a graduate level project. Specific case studies and discussions will be aimed at understanding how structure can influence biophysical and biogeochemical processes supporting ecosystems, and then describes how rates, timing, and location of physical, chemical, and ecosystem processes can be altered by different restoration strategies to enhance ecosystem services. A project will then be used to apply restoration principles towards solving tangible environmental problems and communication to managers.

0101	Sujay Kaushal	Seats (Total: 20)
	Tu 3:30pm - 6:30pm	ARM 0135

GEOL647 **Observational Geophysics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH140, MATH141, and PHYS141; and (PHYS161 or PHYS171). Credit only granted for: GEOL789O or GEOL647. Formerly: GEOL789O.

Introduces graduate students to instrument design and performance, signal processing, data analysis and inverse theory in geophysics.

0101	Vedran Lekic	Seats (Total: 10)
	TuTh 3:30pm - 4:45pm	ONLINE

GEOL651 **Statistics for Geoscientists**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH115; and non-degree-seeking students require the permission of the instructor. Credit only granted for: GEOL789V or GEOL651. Formerly: GEOL789V.

Practical approach to basic statistics applied in the geosciences. Experimental design, elementary statistics and probability, sequence analysis, spatial analysis, linear regression, nonparametric statistics, bivariate, multivariate and principal components analysis of variance, hypothesis testing. Problem sets and participatory discussion of statistical applications in the current literature.

0101	Michael Evans	Seats (Total: 14)
	M 10:00am - 12:50pm	ONLINE

GEOL652 **Advanced Watershed and Wetland Hydrology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: GEOL452; or permission of CMNS-Geology department. Restriction: Non-degree-seeking students require the permission of the instructor.

Physical and chemical processes in watershed and wetland systems: with an emphasis on redox reactions.

0101	Karen Prestegaard TuTh 3:30pm - 4:45pm	Seats (Total: 10) ESJ 0202

GEOL670 **Physical Oceanography**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of CMNS-Atmospheric & Oceanic Science department; or permission of CMNS-Geology department. Jointly offered w ith AOSC420, AOSC670. Credit only granted for: GEOL670, AOSC670 or AOSC420.

Ocean observations. Water masses, sources of deep water. Mass, heat, and salt transport, geochemical tracers. Western boundary currents, maintenance of the termocline. Coastal and estuarine processes. Surface waves and tides. Ocean climate.

0101	Jacob Wenegrat MW 3:15pm - 4:30pm	Seats (Total: 11) ONLINE
AM01	Jacob Wenegrat MW 3:15pm - 4:30pm	Seats (Total: 1) ONLINE

GEOL688 **Geology Colloquium**

Credits: 1 Grading Method: Sat-Fail

Contemporary research topics and issues in geosciences are explored through the weekly Geology departmental colloquium and discussion of its contents.

0101	Megan Newcombe F 3:00pm - 4:30pm	Seats (Total: 30) ONLINE

GEOL789A **Recent Advances in Geology; Current Topics in Volcanology**

Credits: 3 Grading Method: Regular, Audit

Recent advances in geology research.

Overview of volcanology with an emphasis on geochemical and geophysical signals of volcanic unrest.

0101	Megan Newcombe	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	TYD 0102

GEOL789E **Recent Advances in Geology; Active Tectonics**

Credits: 3 Grading Method: Regular, Audit

Recent advances in geology research.

0101	Mong-Han Huang	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	BPS 1238

GEOL789O **Recent Advances in Geology; Chemical Geodynamics**

Credits: 3 Grading Method: Regular, Audit

Recent advances in geology research.

Students will examine a series of outstanding problems in Solid Earth and Planetary Sciences that remain under-constrained. We will quantitatively model chemical and physical data that defines, to the best of understanding, the nature of the core, mantle and crust of the Earth and their equivalents for the Moon and the rocky planets. Proper treatment of uncertainties will be emphasized.

0101	William McDonough	Seats (Total: 10)
	MW 3:30pm - 4:45pm	ONLINE

GEOL798 **Seminar in Geology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Discussion of special topics in current literature in all phases of geology.

Contact department for information to register for this course.

GEOL799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

GEOL898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

GEOL899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

GERM Germanic Studies Fall 2020

GERM103 **Intensive Elementary German**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed GERM102; and must not be a fluent/native speaker of German. Credit only granted for: GERM102 or GERM103.

Covers speaking, reading, writing, listening, and culture of German-speaking world.

0101	Hayley Derryberry MWF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
0102	Hayley Derryberry MWF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

GERM148Y **Germanic Languages - Elementary I; Yiddish I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Basic instruction in a Germanic language other than German; Yiddish and Swedish are offered regularly, Danish, Netherlandic, and Norwegian when demand is sufficient. Subtitle will reflect the language. May be repeated in a different language.

Jointly offered with JWST281. Credit only granted for JWST281 or GERM148 Y. Introduction to the Yiddish language, with emphasis on speaking, reading, and writing skills. Students will also learn the history of thelanguage, its significance to Jewish culture, its origins and basic structure.

0101	Adi Mahalel	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm Class time/details on ELMs	ONLINE ONLINE
	This is a Big Ten Academic Alliance Course-Share course.	

GERM203 **Intensive Intermediate German**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: GERM103; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed GERM201; and must not have completed GERM202; and must not be a fluent/native speaker of German. Credit only granted for: GERM202 or GERM203.

Covers speaking, reading, writing, listening, and culture of German-speaking world.

0101	Michael Lipkin	Seats (Total: 25)
	MWF 11:00am - 11:50am Class time/details on ELMs	ONLINE ONLINE
0102	Michael Lipkin	Seats (Total: 25)
	MWF 12:00pm - 12:50pm Class time/details on ELMs	ONLINE ONLINE

GERM204 **German Grammar Review**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: GERM203; or Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a fluent/native speaker of German.

An in-depth study and analysis of selected grammatical topics in a contextualized framework.

0101	Regina Ianozi	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ONLINE

GERM269A **Special Topics in Study Abroad II; Elementary German I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM269B **Special Topics in Study Abroad II; Elementary German II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM301 **Conversation and Composition I: The German-Speaking World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GERM204; or students who have taken courses with comparable content may contact the department.

Practice in contemporary spoken and written German. Systematic review of grammar, and exercises in composition. Emphasis on cultural contrasts in the German-speaking world.

0101	Regina Ianozi TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE

GERM302 **Conversation and Composition II: Current Topics in German-Speaking Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GERM301; or students who have taken courses with comparable content may contact the department.

Further practice in contemporary spoken and written German. Contemporary social, political, and cultural themes.

0101	Regina Ianozi TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE

GERM319G **Selected Topics in Germanic Language Studies; Seminar in German Language**

Credits: 3 Grading Method: Regular

The analysis of the German language as a reflection of cultural, functional, and social practice in the German-speaking world.

Contact department for information to register for this course.

GERM322 **Highlights of German Literature and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Prerequisite: GERM302; or students who have taken courses with comparable content may contact the department.

Selected literary masterworks, social and cultural issues, and historical events in German-speaking countries from the Enlightenment, Romanticism, Junges Deutschland, Realism, Naturalism and its counter currents, Expressionism to the present. Taught in German.

Taught in German. Cross-listed with GERM322H.

0101	Josh Alvizu	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

GERM322H **Highlights of German Literature and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: GERM302; or students who have taken courses with comparable content may contact the department.

Selected literary masterworks, social and cultural issues, and historical events in German-speaking countries from the Enlightenment, Romanticism, Junges Deutschland, Realism, Naturalism and its counter currents, Expressionism to the present. Taught in German.

Taught in German. Cross-listed with GERM322.

0101	Josh Alvizu	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

GERM369C **Special Topics in Study Abroad III; German Composition I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM369D **Special Topics in Study Abroad III; German Composition II**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM369K **Special Topics in Study Abroad III; Introduction to German Literature**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM369M **Special Topics in Study Abroad III; Europeans and the Middle East: War & Peace, Culture and Exchange, 1798-Present**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM369P **Special Topics in Study Abroad III; Pop Culture: European-American Trends**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM385 **German Cinema**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHU

Cross-listed with: CINE385. Credit only granted for: GERM385, CINE385 or FILM385. Formerly: FILM385.

A history of German cinema from the golden age of silent films to the flourishing film culture of the 21st Century. Focuses on changing ideas of the role and purpose of national cinema, as well as the cinematic representation of nation and national identity. Taught in English.

0101	Hester Baer	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

GERM386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

GERM389F **Topics in Germanic Culture; Berlin: History, Memory, Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics in the cultures of the German, Germanic, Indo-European peoples and of their culturally related non-Indo-European neighbors. Taught in English.

Contact department for information to register for this course.

GERM389G **Topics in Germanic Culture; German American Cultural Contrasts**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics in the cultures of the German, Germanic, Indo-European peoples and of their culturally related non-Indo-European neighbors. Taught in English.

Contact department for information to register for this course.

GERM397H **Honors Reading (Independent Study)**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Supervised reading to be taken normally only by students admitted into honors program.

Contact department for information to register for this course.

GERM399E **Selected Topics in Germanic Studies; The Great Derangement: Climate, Art, and Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course explores the relationship between climate change and art & literature, with an emphasis on rethinking the relationship between humans and the natural world. Materials to be studied include novels, poems, earth history, films, performances, climate science, photographs, exhibitions, protests, and theoretical texts. Taught in English.

0101	Josh Alvizu	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

GERM399F **Selected Topics in Germanic Studies; The Human Condition and the Totalitarian Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

GERM411 **German for International Business I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced skills in German for international business, including understanding and writing correspondence, reports, graphics, ads, etc., according to current German commercial style.

Contact department for information to register for this course.

GERM436 **The Usual Suspects: Criminals in German Literature and Film**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHU

Prerequisite: GERM320 or GERM322; or permission of instructor.

An examination of how historical, cultural and political discourses in German-speaking countries influence social norms and criteria for judging what is considered socially acceptable or "deviant". Texts and films span from the 18th to 21st centuries. Taught in German.

0101	Julie Koser	Seats (Total: 20)
	Tu 3:30pm - 6:15pm	ONLINE

GERM439J **Selected Topics in German Literature; Introduction to the History of the German Language**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special study of an author, school, genre, or theme. Taught in German.

Contact department for information to register for this course.

GERM439K **Selected Topics in German Literature; Future Tense: Speculative Visions in Contemporary German Literature and Film**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special study of an author, school, genre, or theme. Taught in German.

Cross-listed with GERM689K. Credit only granted for GERM439K or GERM689K. This seminar investigates how literature and film can help us speculate on the future and imagine more just worlds. We will consider how German-language writers and filmmakers respond to the precarity caused by neoliberal capitalism, climate change, biopolitics, colonialism, and racist violence by offering alternative and resistant visions that help us to think through the problems of the present. Taught in German.

0101	Hester Baer	Seats (Total: 20)
	W 4:30pm - 7:15pm	ONLINE

GERM499 **Directed Study**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Contact department for information to register for this course.

GERM689J **Special Topics - M.A. Level; Usual Suspects: Criminals in German Literature and Film**

Credits: 3

Grading Method: Regular, Audit

M.A.-level study of a literary, linguistic or cultural topic in German or Germanic studies.

0101	Julie Koser	Seats (Total: 20)
	Tu 3:30pm - 6:15pm	ONLINE

GERM689K **Special Topics - M.A. Level; Future Tense: Speculative Visions in Contemporary German Literature and Film**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

M.A.-level study of a literary, linguistic or cultural topic in German or Germanic studies.

Cross-listed with GERM689K. Credit only granted for GERM439K or GERM689K. This seminar investigates how literature and film can help us speculate on the future and imagine more just worlds. We will consider how German-language writers and filmmakers respond to the precarity caused by neoliberal capitalism, climate change, biopolitics, colonialism, and racist violence by offering alternative and resistant visions that help us to think through the problems of the present. Taught in German

0101	Hester Baer	Seats (Total: 20)
	W 4:30pm - 7:15pm	ONLINE

GERM798 **Master's Independent Study**

Credits: 1-3

Grading Method: Regular, Audit

Contact department for information to register for this course.

GERM799 **Master's Thesis Research**

Credits: 1-6

Grading Method: Sat-Fail

Contact department for information to register for this course.

GERM888 **Doctoral Independent Study**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Contact department for information to register for this course.

GERM898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

GERM899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

GREK Greek Fall 2020

GREK101 **Elementary Ancient Greek I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Restriction: A student who has had two units of Greek in high school may register for GREK101 for purposes of review but not for credit.

Study of basic grammar, development of reading facility, and introduction to Athenian life and culture in the fifth century B.C.

Classical and New Testament Greek.

0101	Lillian Doherty	Seats (Total: 15)
	MWF 10:00am - 10:50am	ONLINE
	W 9:00am - 9:50am	ONLINE

GREK111 **Elementary Modern Greek I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must not be a native speaker of Greek. Credit only granted for: FOLA108G or GREK111. Formerly: FOLA108G.

An introduction to the language and culture of modern Greece. Students begin to acquire the basic tools of the language and to communicate, in simple everyday situations. This is the first of our two-semester sequence in Elementary Modern Greek and contributes to the fulfillment of the Global Engagement requirement of the College of Arts and Humanities.

0101	Polyvia Parara	Seats (Total: 15)
	MWF 12:00pm - 12:50pm	ONLINE

GREK201 **Intermediate Ancient Greek**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GREK102; or students who have taken courses with comparable content may contact the department.

Advancing beyond the basic skills developed in GREK 101 and GREK 102; review of selected grammatical concepts; continuous reading of passages from Greek literature.

0101	Gregory Bucher	Seats (Total: 10)
	MWF 2:00pm - 2:50pm	ONLINE
	W 1:00pm - 1:50pm	ONLINE

GREK211 **Intermediate Modern Greek I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GREK112; or permission of instructor. Credit only granted for: FOLA118G or GREK211. Formerly: FOLA118G.

A continuation of the study of basic structures and the development of fluency in functional, spoken and written communication. This is the first of our two-semester sequence in Intermediate Modern Greek and contributes to the fulfillment of the Global Engagement requirement of the College of Arts and Humanities.

0101	Polyvia Parara	Seats (Total: 7)
	MWF 10:00am - 10:50am	ONLINE

GREK398 **Advanced Modern Greek**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Develops advanced communication skills in the modern Greek language: speaking, listening, reading, and writing.

0101	Polyvia Parara	Seats (Total: 5)
	MWF 11:00am - 11:50am	ONLINE

GREK488B **Greek Readings; INTERMEDIATE ANCIENT GREEK**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The reading of one or more selected Greek authors. Reports.

0101	Gregory Bucher	Seats (Total: 5)
	MWF 2:00pm - 2:50pm	ONLINE
	W 1:00pm - 1:50pm	ONLINE

GREK488K **Greek Readings; Historians**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The reading of one or more selected Greek authors. Reports.

0101	Jorge Bravo	Seats (Total: 5)
	Tu 5:00pm - 7:40pm	ONLINE

GREK499 **Independent Study in Greek Language and Literature**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

GREK606 **Greek Historians**

Credits: 3 Grading Method: Regular, Audit

Survey of the Greek historians, concentrating on Herodotus and Thucydides, contrasting the two historians in the areas of subject, methods of research, composition, and achievement.

0101	Jorge Bravo	Seats (Total: 7)
	Tu 5:00pm - 7:40pm	ONLINE

GREK699 **Independent Study in Greek Literature**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

GREK799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

GVPT Government and Politics Fall 2020

GVPT101 **Introduction to Political Science**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

A study of the basic principles and concepts of political science.

Contact department for information to register for this course.

GVPT170 **American Government**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

A comprehensive study of national government in the United States.

0101	Kristina Miler TuTh 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Kristina Miler TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Kristina Miler TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0104	Kristina Miler TuTh 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0105	Kristina Miler TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0106	Kristina Miler TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0107	Kristina Miler TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0108	Kristina Miler TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0109	Kristina Miler TuTh 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
FC01	Simon Sheaff MW 6:00pm - 7:15pm *Restricted to students in Freshman Connection.*	Seats (Total: 40) ONLINE	

GVPT200 **International Political Relations**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB	General Education: DSHS, DVUP

A study of the major factors underlying international relations, the causes of conflict and cooperation among international actors, the role of international institutions, the interactions of domestic and foreign policies, and major issues in security, economy and the environment.

0101	Todd Allee MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Todd Allee MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Todd Allee MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0104	Todd Allee MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0105	Todd Allee MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0106	Todd Allee MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0107	Todd Allee MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0108	Todd Allee MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0109	Todd Allee MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
FC01	Sean Rao TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 40) ONLINE	

GVPT201 **Scope and Methods for Political Science Research**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Credit only granted for: GVPT100 or GVPT201. Formerly: GVPT100.

An introduction to empirical research in political science.

0101	Sarah Croco MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Sarah Croco MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Sarah Croco MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

0201	Sarah Croco MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0202	Sarah Croco MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0203	Sarah Croco MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
0204	Sarah Croco MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0205	Sarah Croco MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0206	Sarah Croco MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion

GVPT205S **Special Topics in International Ethics, Conflict, and Immigration**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, DVUP

Prerequisite: GVPT105. Recommended: GVPT241. Restriction: Must be in College Park Scholars program; and must be in GVPT international Studies program.

An examination of issues in international ethics, conflict generated at the international level, and problems in immigration policy and law, including theories of rights and immigration, and ideological sources of international violence.

0101	Richard Boyd Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 26) ONLINE ONLINE	Discussion
0102	Richard Boyd Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 25) ONLINE ONLINE	Discussion

0103	Richard Boyd Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 26) ONLINE ONLINE	 Discussion
0104	Richard Boyd Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

GVPT217 **Mock Trial**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with MLAW217. Credit only granted for: MLAW217, GVPT217, or GVPT319A. Formerly: GVPT319A.

Experience the excitement and reward of arguing, and perhaps winning your client's case in court. Mock Trial is designed for students who are interested in learning practical techniques for shaping the evidence, using the law, and exploiting the courtroom to create a coherent and convincing case theory

Click here for course permission.

0101	William Mundy W 6:30pm - 9:15pm	Seats (Total: 40) ONLINE	

GVPT241 **The Study of Political Philosophy: Ancient and Modern**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Examines some of the salient continuities and breaks between the ancient and modern traditions in Western political philosophy.

0101	Sujith Kumar TuTh 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Sujith Kumar TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Sujith Kumar TuTh 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0104	Sujith Kumar TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0105	Sujith Kumar TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0106	Sujith Kumar TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
0107	Sujith Kumar TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0108	Sujith Kumar TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
FC01	Sujith Kumar TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE	

GVPT258B **Introduction to Political Science Topics in Study Abroad; Enemy Within: Spies and Espionage in the Cold War**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258C **Introduction to Political Science Topics in Study Abroad; Government and Politics in China**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258D **Introduction to Political Science Topics in Study Abroad; Danish Politics and Society**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258E **Introduction to Political Science Topics in Study Abroad; Government and Politics in Spain**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258F **Introduction to Political Science Topics in Study Abroad; European Union Law and Economic Integration**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258I **Introduction to Political Science Topics in Study Abroad; Government and Politics in Italy and Europe**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258N **Introduction to Political Science Topics in Study Abroad; Arms Control in the Nuclear Realm**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258P **Introduction to Political Science Topics in Study Abroad; Sustainable Development: Environmental, Political and Social Issues**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258R **Introduction to Political Science Topics in Study Abroad; Peace and Conflict Honors Seminar II: Regional Conflicts**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258T **Introduction to Political Science Topics in Study Abroad; Terrorism and Political Violence**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT273 **Introduction to Environmental Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

An overview of modern environmental philosophy, politics, and policy, exploring environmental politics in the US by way of comparison with other developed and developing countries.

FC01	Matthew Regan MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE	

GVPT280 **The Study of Comparative Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introduction to the comparative study of politics and governance, including the analytical concepts for studies of politics and a survey of the major types of regimes, including democratic and authoritarian/communist regimes.

0101	Mary Kate Schneider MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Mary Kate Schneider MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

0103	Mary Kate Schneider MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0104	Mary Kate Schneider MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	Discussion
0105	Mary Kate Schneider MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	Discussion
0106	Mary Kate Schneider MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion

GVPT289B **Special Topics in Government and Politics; Globalization**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT289J **Uncertain Partners: US and China in a Changing World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

Credit only granted for: GVPT204 or GVPT289J. Formerly: GVPT289J.

The rapid ascent of the People's Republic of China (PRC) as a major political and economic power has meant that its relationship with the United States has become central in contemporary international politics. To an increasing extent, some of the biggest global challenges--ranging from nuclear proliferation, to climate change, to economic growth--require U.S.-China cooperation if they are to be managed effectively. Yet the U.S.-China relationship is at times turbulent, and its future remains highly uncertain. Will the U.S. and China be able to forge a closer partnership that will enable them to cooperate in dealing with some of the vexing challenges facing the international community? Or are they more likely to drift toward a more adversarial relationship, as China's growing power--and the US reaction--generate a vicious cycle of mutual mistrust? In this class, students will grapple with these questions as they learn about the history of U.S.-China relations, and about many of the current issues facing the relationship.

0101	Scott Kastner MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Scott Kastner MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Scott Kastner MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Scott Kastner MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0105	Scott Kastner MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	Scott Kastner MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

GVPT289L **Religions, Beliefs, and World Affairs**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP, SCIS

Credit only granted for: GVPT210 or GVPT289L. Formerly: GVPT289L.

Introduces students to an increasingly important question: what is the relationship between religion and politics around the world? For a long period in the 20th Century, religion seemed to be decreasing in importance. Eventually, it was thought, religion would simply go away and secularism, development, and rationality would rule the day. In the last generation, however, events like the Iranian Revolution, the rise of the Christian Right, 9/11, the Tibetan monks protest, the spread of Truth and Reconciliation Commissions, and numerous wars fought in the name of God have brought religion back to prominence in world affairs. In this course, we will explore the contemporary impact of religions on politics around the world, through four broad themes: how to understand religion in politics , the relationship between religion and the state, religious groups as sources of conflict and peace, and contemporary religio-political challenges.

This course is intended to introduce students to an increasingly important question: what is the relationship between religion and politics around the world? For a long period in the 20th Century, religion seemed to be decreasing in importance. Eventually, it was thought, religion would simply go away and secularism, development, and rationality would rule the day. In the last generation, however, events like the Iranian Revolution, the rise of the Christian Right, 9/11, the Tibetan monks protest, the spread of Truth and Reconciliation Commissions, and numerous wars fought in the name of God have brought religion back to prominence in world affairs. In this course, we will explore the contemporary impact of religions on politics around the world, through four broad themes: how to understand religion in politics , the relationship between religion and the state, religious groups as sources of conflict and peace, and contemporary religio-political challenges.

0101	John McCauley MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	John McCauley MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	John McCauley MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	John McCauley MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0105	John McCauley MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	John McCauley MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

GVPT289X **Special Topics in Government and Politics; Introduction to European Union**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT306 **Global Environmental Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in one of the following programs (Government & Politics; Government & Politics: International Relations) ; or permission of BSOS-Government & Politics department.

Focus on three processes of international environmental policy development- identifying problems, negotiating solutions, and implementing agreements- through a range of case studies, including global climate change.

Restriction: Must be in Government & Politics program, Government & Politics: International Relations program, or ENSP: Environmental Politics & Policy program.

0101	Jennifer Wallace	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

GVPT309C **Topics in International Relations; Advances in the Study of Conflict**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in international relations.

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. This course will bring together faculty from several top schools around the country (e.g, UNC, Harvard, Dartmouth, UT Austin, U Chicago, OSU, Columbia, etc.) to share the latest research on international conflict and related topics. Lectures will be pre-recorded, so you can watch them at your convenience. On the week that each instructor's lecture is aired, he or she will also host an evening Zoom meeting from 7:00-7:50pm EST every Wednesday to discuss the lecture and the readings with you. Rather than ask for a paper or midterm/final, grading will be via short multiple-choice quizzes, taken at the time of your choosing at the end of each week. In addition to quizzes, students must submit questions to the faculty member ahead of each zoom meeting and attend the zoom session.

0101	Sarah Croco	Seats (Total: 100)
	W 7:00pm - 7:50pm	ONLINE
	Class time/details on ELMs	ONLINE

GVPT309H **Topics in International Relations; British Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in international relations.

Contact department for information to register for this course.

GVPT319J **Topics in Social Advocacy; Making the World a Better Place: Global Development and Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research and discussion of variety of topics related to social advocacy.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. Suppose you want to make the world a better place. You need to explore the global potential for improvement. What is the potential for justice in the world? What is the potential for sustainable development? What about the potential for a better form of democracy or a better form of capitalism? The short term potential for improvement is almost guaranteed to be limited, but what if we made an effort to think in a long term way? Can one do that? Shouldn't one do that? These are the big issues we will explore in this course.

0101	Karol Soltan	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

GVPT319L **Topics in Social Advocacy; Legal Advocacy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research and discussion of variety of topics related to social advocacy.

The focus in this course is on trial advocacy, a concept which refers to the litigation process and adversarial proceedings that occur between the parties, and that ultimately are resolved by judges or jurors. Although the practice of law in the United States involves more than litigation (e.g., corporate or "transactional" legal work, which typically occurs out of court), the vast majority of law school courses, including virtually all traditional first-year courses, implicate legal principles related to litigation. Thus, just like law school itself, this course focuses on legal principles and concepts related to litigation. By the end of this course, students will have been exposed to the majority of legal concepts that one encounters in law school and in the practice of law and, it is hoped, will begin (as they say in law school) to "think like a lawyer."

ESG1	James Trusty	Seats (Total: 30)
	Tu 6:30pm - 9:00pm	Location: TBA
	Restricted to CCJS students at Shady Grove.	

GVPT320 **Advanced Empirical Research**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT201. Restriction: Must be in Government & Politics or Government & Politics: International Relations program.

Allows students to build on the knowledge of statistical inference they gained from GVPT201. Topics include data collection, data cleaning, data analysis, and data visualization. By the time students complete this class, they will be able to do basic statistical modeling using OLS regression independently.

0101	Candace Turitto TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE	

GVPT354 **International Development and Conflict Management**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Sophomore standing or higher; and must be in one of the following minor programs (International Development and Conflict Management; Global Engineering Leadership; Global Poverty, Global Terrorism Studies) and have permission of the Center for International Development, or must be in the Government and Politics major with permission of the Government and Politics department. Additional information: Students enrolled in MIDCM are expected to take the course during the Fall semester after admission to the program.

Serves as the gateway course for the Minor in International Development and Conflict Management. Provides an introductory foundation in the theory and practice of international development and conflict management. Introduces the structures, key players, intersections, and main trends in the evolution of the fields. Explores causal factors that drive economic growth, poverty, inequality, and conflict, as well as the resources, methods, and tools available to track and address these issues.

0101	Stacy Kosko W 2:00pm - 3:40pm F 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Stacy Kosko W 2:00pm - 3:40pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Stacy Kosko W 2:00pm - 3:40pm F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

GVPT356 **Capstone in International Development**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSSP, DVCC

Prerequisite: GVPT354. Restriction: Enrollment is restricted to students in the Minor in International Development and Conflict Management; and sophomore standing or higher; and permission of BSOS-Government & Politics department.

Serves as one of the two capstone courses for the Minor in International Development and Conflict Management. Focuses on advanced theory and the practice and profession of international development and is designed to provide students an introduction to, and a chance to engage with, a core set of practical skills relevant to the field.

0101	Stacy Kosko	Seats (Total: 31)
	M 2:00pm - 4:45pm	ONLINE

GVPT358A **Study Abroad Seminar in Political Science; Migration and Multiculturalism in Europe**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358D **Study Abroad Seminar in Political Science; Politics and Economy of Spain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358F **Study Abroad Seminar in Political Science; Government and Politics in France**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358P **Study Abroad Seminar in Political Science; Political Rhetoric: Blogs, Speeches, and Spin**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358R **Study Abroad Seminar in Political Science; Religion and Politics in Europe**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT368B **Special Topics in Government and Politics; The United States and Israel: Likely or Unlikely Allies?**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in government and politics.

Cross-listed with ISRL329N. Credit granted for GVPT368 or ISRL329N An examination of the U.S. - Israel relationship through historical and thematic lenses. Stretching from the pre-state era through the post-Cold War alliance and the intensive U. S. role mediating Arab-Israeli peace, which covers nearly a century of U. S. foreign policy. It will include domestic sources that have shaped U. S. policy, including public opinion, and conclude by examining scenarios for increased cooperation and managing tension in the relationship.

0101	Scott Lasensky	Seats (Total: 35)
	W 4:00pm - 6:30pm	ONLINE

GVPT368L **Special Topics in Government and Politics; African-American Politics from Frederick Douglass to Barack Obama**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in government and politics.

Jointly offered with AASP499P. Credit only granted for AASP499P, GVPT368L, or PLCY388B.

0101	Kameron Patterson	Seats (Total: 30)
	Tu 3:30pm - 6:00pm	ONLINE

GVPT376 **Applied Field Research in Government and Politics**

(Perm req)

Credits: 3-6

Grading Method: Sat-Fail

Prerequisite: GVPT170. Corequisite: GVPT377.

Students in this course participate as interns in an agency of government or in some other appropriate political organization. Assignments are arranged to provide students with insights into both theoretical and practical aspects of politics. Under the tutelage of the host agency and an academic advisor, students conduct a major research project of mutual interest to the student and his or her host agency in the field of government and politics.

Contact department for information to register for this course.

GVPT386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of BSOS-Government & Politics department; and junior standing or higher.

Contact department for information to register for this course.

GVPT388 **Topical Investigations**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent research and writing on selected topics in government and politics.

Permission of Director of Undergraduate Studies required.

Contact department for information to register for this course.

GVPT388M **Topical Investigations; Mock Trial**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Independent research and writing on selected topics in government and politics.

0101	William Mundy	Seats (Total: 40)
	W 6:30pm - 9:15pm	ONLINE

GVPT389 **Experiential Learning II**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Experiential credit for working in government & politics related internships, research, and teaching opportunities.

Junior standing.

Contact department for information to register for this course.

GVPT390 **Game Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must not have completed ECON414. Credit only granted for: GVPT399A, GVPT390, CMSC474 or ECON414. Formerly: GVPT399A.

Introduction to game theory with applications to political science, economics and sociology. Topics include preference theory, expected utility theory, Nash equilibria, subgame perfection, repeated games, folk theorems, and evolutionary stability.

0101	Piotr Swistak	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	ONLINE

GVPT396 **Introduction to Honors Research**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Government & Politics Honors Program; and must have permission of the Government & Politics Honors Program.

A required course for all honors students designed to emphasize library research, methodology, and writing skills in political science and political philosophy. A written proposal, bibliography and research design for an honors paper required of all students as a final project.

Contact department for information to register for this course.

GVPT397 **Honors Research**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: GVPT396. Restriction: Must be in Government & Politics Honors Program.

Individual reading and research. Preparation of an original paper.

Contact department for information to register for this course.

GVPT399C **Seminar in Government and Politics; The Case of Catalonia**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399D **Seminar in Government and Politics; Society and Politics in Contemporary Spain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399I **Seminar in Government and Politics; Globilization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399L **Seminar in Government and Politics; British Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399N **Seminar in Government and Politics; Political Movements in the European Union**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399X **Seminar in Government and Politics; Political Movements in the European Union**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT404 **Political Economy of Foreign Aid**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: GVPT200. Restriction: Must be in Government & Politics or Government & Politics: International Relations program. Credit only granted for: GVPT409R or GVPT404. Formerly: GVPT409R.

The world spends hundreds of billions of dollars on foreign aid every year. The effects of this aid spending are controversial. Research supports both pessimistic and optimistic views of foreign aid's effectiveness, with little consensus. Where does aid money go? What are the motivations of aid donors? Is foreign aid effective at achieving its goals? Why or why not? This course is designed to survey the promise and the challenges of foreign aid as a policy tool. The first half of the course will focus on the motivations and goals of foreign aid. We will consider various foreign aid donors, such as countries, institutions, and individuals, to understand the motivations behind and effects of foreign aid. We will create a typology of foreign aid agendas, motivations, and donors. The second half of the course will consider the challenges specific to foreign aid. This includes both technical challenges and political challenges. We will consider the strategies that aid donors and organizations have taken to try to overcome these challenges.

0101	Shannon Carcelli	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

GVPT406 **International Organizations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program; and junior standing or higher. Or must be in Government & Politics: International Relations program; and junior standing or higher.

A basic introduction to the full range of international organizations that have come into being over the past century and one-half, including those that aspire to be universal or global, those with a geopolitical or regional focus, and those that address specific structural or functional areas of human endeavor or issue areas.

0101	Todd Allee	Seats (Total: 30)
	MW 3:30pm - 4:45pm	ONLINE

GVPT409A **Seminar in International Relations and World Politics; Peace, Justice, and Conflict Resolution**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. This course examines classic and contemporary perspectives on peace, justice, and conflict resolution before, during, and after armed conflict.

0101	Gabriella Lloyd	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

GVPT409E **Seminar in International Relations and World Politics; International Relations of East Asia**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program or Goverment & Politics: International Relations program. An examination of international relations in East Asia, focusing mostly Northeast Asia. The course will provide some background on the evolution of international politics in the region over the past several decades, and will examine several contemporary issues- including the North Korean nuclear issue, the relationship across the Taiwan Strait, and maritime disputes in the East and South China Seas- in depth.

0101	Scott Kastner	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

GVPT409O **Seminar in International Relations and World Politics; The Politics of Climate Change**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT200. Restriction: Must be in Government & Politics or Government & Politics: International Relations program. This seminar surveys the political and normative challenges posed by climate change, drawing on scholarly research, policy texts, and popular media accounts. We will pay particular attention to the multi-level nature of climate policy-making, examining the interaction between political processes in sub-national, national, and international arenas.

0101	Jennifer Hadden	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

GVPT409Q **Seminar in International Relations and World Politics; Globalization and the Future of Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Globalization and the Future of Politics examines a wide variety of seemingly disparate topics that are united by the fact that they all transcend national boundaries, and therefore present trans-national challenges that can only be met by trans-national solutions. As citizens or residents of the United States, we stand near the center of an interlinking web of truly global issues and opportunities. This course will examine our role in each of these issues, in order to provide a comprehensive perspective on our place in the world today.

ESG1	Laszlo Korossy	Seats (Total: 40)
	W 2:00pm - 4:30pm	ONLINE
	Restricted to CCJS students at Shady Grove.	

GVPT409V **Seminar in International Relations and World Politics; Game Theory And International Security**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Contact department for information to register for this course.

GVPT409W **Seminar in International Relations and World Politics; Southeast Asia in Contemporary Global Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. Southeast Asia, home to three major religious cultures and various regime types, is one of the most politically and socially diverse regions of the world. While the region is unique for its diversity, its states face challenges that are common in other parts of the world including globalization; adjusting to the new geopolitical landscape of rising global powers; and external pressure to improve the standards of human rights, the environment and democracy. Given this dynamic political context, this course is designed to give students a greater understanding of the problems and prospects of the region, as well as the ability to assess its efforts to adapt to the changing regional and international environment.

0101	Jennifer Wallace	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

GVPT417 **Seminar in Advanced Topics in Environmental Policy Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT273. Restriction: Must be in one of the following programs (Government & Politics; Environmental Sci&Policy-Env Politics & Policy). Credit only granted for: GVPT419B or GVPT417. Formerly: GVPT419B.

A series of critical tools and methods used to analyze environmental policy. This class should be of interest to students who are either considering a career or graduate studies in environmental protection.

0101	Isabella Alcaniz	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

GVPT423 **Elections and Electoral Behavior**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Restriction: Must be in Government & Politics program.

An examination of various topics relating to elections; the focus includes the legal structure under which elections are conducted, the selection and nomination process, the conduct of election campaigns, and patterns of political participation and voting choice in different types of elections.

0101	James Gimpel	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

GVPT423H **Elections and Electoral Behavior**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Restriction: Must be in Government & Politics program.

An examination of various topics relating to elections; the focus includes the legal structure under which elections are conducted, the selection and nomination process, the conduct of election campaigns, and patterns of political participation and voting choice in different types of elections.

Restriction: Must be in Government & Politics Honors Program.

0101	James Gimpel	Seats (Total: 20)
	Tu 2:00pm - 4:45pm	ONLINE

GVPT429A **Problems in Political Behavior; Quantitative Study of Exit Polling and Elections**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The problem approach to political behavior with emphasis on theoretical and empirical studies on selected aspects of the political process.

Prerequisite: GVPT201. Restriction: Must be in Government & Politics program or Government & Politcs: International Relations program. This class will teach students skills in data analysis and data visualization. The primary focus will be the 2020 election. Students are also required to participate in exit polling before and on the day of the election. In ordert to register for this course, students must complete a Memorandum of Understading indicating their ability to particpate in exit polling. Completed forms should be submitted via email to Tristan Hightower, Assistant Director of Global Learing, at thighto@umd.edu.

0101	Sarah Croco	Seats (Total: 20)
	Tu 12:30pm - 3:15pm	ONLINE

GVPT429C **Problems in Political Behavior; Campaign Modeling and Data Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The problem approach to political behavior with emphasis on theoretical and empirical studies on selected aspects of the political process.

Prerequisite: GVPT201. Restriction: Must be in Government & Politics program or Govertment & Politics: International Relations program. This course is designed to provide students with advanced knowledge and experience conducting real-world political campaign analysis. Using the R statistical software, students will develop a fundamental analytical expertise in combing through commonly bloated campaign cross-tabs, prepping and evaluating data from field experiments, managing voter files, building predictive voter models, presenting to clients, and more.

0101	Candace Turitto	Seats (Total: 20)
	Th 12:30pm - 3:15pm	ONLINE

GVPT431 **Introduction to Constitutional Law**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT170 and GVPT331. Restriction: Must be in one of the following programs (Government & Politics; Government & Politics: International Relations) ; and junior standing or higher.

A systematic inquiry into the general principles of the American constitutional system, with special reference to the role of the judiciary in the interpretation and enforcement of the federal constitution.

Jointly offered with MLAW358X. Credit only granted for GVPT431 or MLAW35 8X.

0101	Michael Spivey	Seats (Total: 70)
	MW 1:00pm - 2:15pm	ONLINE

GVPT439B **Seminar in Public Law; First Amendment: Free Speech, Religion, and the Constitution**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in public law. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. Credit only granted for GVPT439B or MLAW358F. Prerequisite: GVPT431 or GVPT432. The purpose of this course is to explore the various facets of the First Amendment. Why protect speech and the practice of religion? Are these "special?" What is speech? What is religion? Do rights to speech and religion trump other rights? In this course, we will examine various "types" of speech and their relationship to the First Amendment as well as the religion provisions of the First Amendment: the Free Exercise Clause and the Establishment Clause.

0101	Michael Spivey	Seats (Total: 20)
	MW 11:00am - 12:15pm	ONLINE

GVPT439C **Seminar in Public Law; Current Issues in the Supreme Court**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in public law. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. Prerequisite: GVPT431 or GVPT432. Credit only granted for GVPT439C or MLAW358C.

0101	Michael Spivey	Seats (Total: 35)
	MW 3:00pm - 4:15pm	ONLINE

GVPT443 **Contemporary Political Theory**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT241. Restriction: Must be in Government & Politics program.

A survey of the principal political theories and ideologies set forth in the works of writers from Karl Marx to the present.

Contact department for information to register for this course.

GVPT445 **Marxism and Postmarxism**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major within BSOS-Government & Politics department.

The study of Marxist thought and an assessment of the critical transformations and reassessments of the theory and practice of Marxism.

0101	Vladimir Tismaneanu Th 2:00pm - 4:45pm	Seats (Total: 30) ONLINE

GVPT449D **Seminar in Political Philosophy; Individual and Group Decision-Making**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in political philosophy. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: Inter national Relations program. Credit granted for PHPE400 or GVPT449D. Foundational issues that arise within the theories of rational choice that underlie the treatments of decision-making found in economics, politics, and the other social sciences. The course is focused on individual decisions (rational choice theory), strategic decisions (game theory) and group decisions (social choice theory). In addition to presenting the formal models of decision making, we also discuss to what extent these mathematical theories explain social interactions. An important aspect of the course is to introduce students to the ways in which economic analysis has been applied to issues in social and political philosophy. Readings will be drawn from the literature in economics, psychology, statistics and political science, as well as philosophy.

0101	Eric Pacuit TuTh 2:00pm - 3:15pm	Seats (Total: 6) ONLINE

GVPT449L **Seminar in Political Philosophy; Liberalism and Its Critics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in political philosophy. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT241. Restriction: Must be in Government & Politics or Government & Politics: International Relations program.

0101	James Glass W 3:30pm - 6:15pm	Seats (Total: 30) ONLINE

GVPT449P **Seminar in Political Philosophy; The Psychotic Edge of Political Life**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in political philosophy. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government and Politics: International Relations program. This course in modern political theory will cover critical concepts in political thought: genocide, legitimacy, responsibility resistance, and political ethics.

0101	James Glass	Seats (Total: 30)
	M 3:30pm - 6:15pm	ONLINE

GVPT456 **The Politics of Terrorism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program. Credit only granted for: GVPT456 or GVPT459T. Formerly: GVPT459T.

Examination of the definition, causes and organization of terrorist activity, along with key domestic and international counter- and anti-terrorism responses. Special emphasis on challanges and opportunities to the scientific study of terrorism.

0101	Moran Stern	Seats (Total: 30)
	Th 2:00pm - 4:45pm	ONLINE

GVPT457H **American Foreign Relations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program; and junior standing or higher.

The principles and machinery of the conduct of American foreign relations and an analysis of the major foreign policies of the United States.

Restriction: Must be in Government & Politics Honors Program.

0101	Shannon Carcelli	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

GVPT459B **Seminar in Comparative Politics; Comparative Political Institutions**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT280 or GVPT282. Restriction: Must be in Government and Politics program. This course provides a general introduction to Comparative Political Institutions. It explores basic political concepts that relate to issues of representation, elections, and congresses.

0101	Ernesto Calvo	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

GVPT459H **Seminar in Comparative Politics; Comparative Constitutional Law**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT280 or GVPT282. Restriction: Must be in Government and Politics Honors program. Introduction to basic issues of constitutional law in a global and comparative perspective. Topics: constitution making and amending, enforcing, suspending, and reasoning with constitutions. Federalism and separation of powers. Fundamental rights. Constitutionalism outside the West. Constitutions beyond states. In this course the US Constitution will not be discussed.

0101	Karol Soltan	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

GVPT459M **Seminar in Comparative Politics; Social Movements**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT200 and GVPT280 or GVPT282. Restriction: Must be in Government & Politics or Government & Politics: International Relations program. Discussion-intensive advanced seminar exploring the ways that social movements mobilize, the role of governments and bystanders in shaping that process, and the outcomes that they produce through connecting history, theory, and scholarship to contemporary politics. Special topics include environmental activism, transnationalism, and violent vs.non-violent strategies.

0101	Jennifer Hadden	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

GVPT459R **Seminar in Comparative Politics; The Rise and Fall of Communism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. This course examines the rise and fall of communism both as a utopian theory and institutional practice in the 20th century. We will discuss Communism's main ideological sources, key notions, as well as the most significant events in the dynamics of communism. The course will explain the appeal of revolutionary politics and the role of "true believers" in totalitarian mass movements.

0101	Vladimir Tismaneanu	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

GVPT459W **Seminar in Comparative Politics; Revolutions and Revolutionary Movements**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT280 or GVPT282. Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. This course examines revolution as a means of political and social change. In the first part of the course, we will examine competing theories about the causes, processes, actors and outcomes of revolution. In the second part of the course, we will apply these theories and approaches to case studies of contemporary revolutions from the 19th century to the present.

0101	Jennifer Wallace	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

GVPT459Y **Seminar in Comparative Politics; Comparative Political Ideology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Recommended prerequisites: GVPT200 and GVPT282 Restriction: Must be in Government & Politics or Government & Politics: International Relations program. A comparative survey of leading political ideologies, including their origins, core tenets, and implications. Specific attention is given to ideology's relationship to material practice, both western and non-western interpretations, and ramifications for contemporary politics. Includes nationalism, populism, religious fundamentalism, liberalism, socialism, and neoliberalism, among other influential ideologies.

0101	Calvert Jones MW 9:00am - 10:15am	Seats (Total: 30) ONLINE

GVPT460 **State Politics and Government**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Recommended: GVPT260. Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program.

A study of the structure, procedures and policies of state governments with special emphasis on intergovernmental relationships, and with illustrations from Maryland governmental arrangements.

0101	Richard Engstrom Th 7:00pm - 9:45pm	Seats (Total: 30) ONLINE

GVPT474 **Political Parties**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Restriction: Must be in Government & Politics program.

A descriptive and analytical examination of American political parties, nominations, elections, and political leadership.

0101	David Karol MW 4:00pm - 5:15pm	Seats (Total: 30) ONLINE

GVPT479D **Seminar in American Politics; Minority Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in American politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT170 Restriction: Must be in Government & Politics or Government & Politics: International Relations program. A comprehensive examination of how minority groups operate within the U.S. political system. The substantive focus of the course will be on the historical positon of minorities in the U.S. political system, on different concepts of representation, on minority group identity, and on political participation and policy issues that are of particular importance to minorities.

0101	Stella Rouse	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

GVPT479K **Seminar in American Politics; Presidential Elections**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in American politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT170 Restriction: Must be in Government & Politics or Government & Politics: International Relations program. This class will explore American Presidential elections. While noting the current campaign unfolding around us, we are interested in the process, not just the events of 2020. We examine the institutions that structure candidates' and voters' behavior and how they have developed historically. We also look at American Presidential elections in comparative perspective, noting electoral arrangements in other countries.

0101	David Karol	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

GVPT482 **Government and Politics of Latin America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program.

A comparative study of the governmental systems and political processes of the Latin American countries.

0101	Isabella Alcaniz	Seats (Total: 30)
	Th 2:00pm - 4:45pm	ONLINE

GVPT485 **Government and Politics of the Middle East**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200; and (GVPT282 or GVPT280). Restriction: Must be in Government & Politics program. Credit only granted for: GVPT485 or GVPT459E. Formerly: GVPT459E.

A comparative study of the governmental systems and political processes of Middle Eastern countries, with special emphasis on the problems of nation-building in emergent countries.

0101	Calvert Jones	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

GVPT600 **Professionalization Seminar in Political Science**

Credits: 1 Grading Method: Regular, Audit

Restriction: Must be in Government and Politics PhD program.

An introduction to the practices, norms, and expectations of professional political science.

0101	Kathleen Cunningham, Patrick Wohlfarth	Seats (Total: 30)
	Th 10:30am - 12:20pm	ONLINE

GVPT604 **Introduction to War and Armed Conflict in World Politics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Recommended: GVPT200. Restriction: Must be in the MA in International Relations program; or permission of Government and Politics department.

Examines major theories of both international and civil wars and reviews major empirical studies that test theories of conflict. The topics include the onset of armed conflict, the duration and outcomes of wars, and the durability of peace in the aftermath of wars. The focus is on developing an understanding of central debates in the literature and primary empirical findings from quantitative and cross-national analyses that are of policy relevance.

0101	Deniz Cil	Seats (Total: 20)
	Tu 5:00pm - 7:45pm	ONLINE

GVPT622 **Quantitative Methods For Political Science**

Credits: 3 Grading Method: Regular, Audit

Introduction to quantitiative methods of data analysis, with emphasis on statistical methods and computer usage. Measures of association, probability, correlation, linear regression estimation techniques, introductory analysis of variance, and use of package computer programs.

Course will meet in the LeFrak OASIS lab. For GVPT majors only.

0101	Patrick Wohlfarth W 1:30pm - 4:15pm F 3:00pm - 5:00pm	Seats (Total: 12) ONLINE ONLINE	Discussion
0201	Patrick Wohlfarth Class time/details on ELMs	Seats (Total: 12) ONLINE	

GVPT700 **Scope and Method of Political Science**

Credits: 3 Grading Method: Regular, Audit

Required of all Ph.D. candidates. A seminar in the methodologies of political science, and their respective applications to different research fields. Interdisciplinary approaches and bibliographical techniques are also reviewed.

0101	Kathleen Cunningham M 12:30pm - 3:15pm	Seats (Total: 12) ONLINE

GVPT708A **Seminar in International Relations Theory; International Relations Theory**

Credits: 3 Grading Method: Regular, Audit

An examination of the major approaches, concepts, and theories in the study of world politics with special emphasis on contemporary literature.

0101	Gabriella Lloyd Th 12:30pm - 3:15pm	Seats (Total: 12) ONLINE

GVPT729A **Special Topics in Quantitative Political Analysis; Advanced Maximum Likelihood Estimation**

Credits: 3 Grading Method: Regular, Audit

An intensive examination of special topics in quantitative methods of political analysis in such areas as survey research methods, exploratory data analysis, advanced data management techniques, or advanced methods of policy analysis.

0101	Ernesto Calvo Tu 1:00pm - 3:45pm	Seats (Total: 12) ONLINE

GVPT770 **Seminar in American Political Institutions**

Credits: 3 Grading Method: Regular, Audit

This is the core institutions seminar in American politics. The course surveys the primary literature in the field and addresses substantively significant topics related to the study of political institutions in the American context.

0101	Kristina Miler	Seats (Total: 12)
	Tu 10:00am - 12:45pm	ONLINE

GVPT780 **Seminar in the Comparative Study of Politics**

Credits: 3 Grading Method: Regular, Audit

An examination of the salient approaches to and conceptual frameworks for the comparative study of politics, followed by the construction of models and typologies of political systems.

0101	Margaret Pearson	Seats (Total: 12)
	Tu 9:30am - 12:15pm	ONLINE

GVPT799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

GVPT803 **Seminar in International Political Organization**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Government and Politics PhD program.

An overview and critical analysis of contemporary theory on international organizations and global governance.

0101	Virginia Haufler	Seats (Total: 12)
	W 3:30pm - 6:15pm	ONLINE

GVPT828O **Selected Problems in Political Behavior; Public Opinion**

Credits: 3 Grading Method: Regular, Audit

Individual reading and research reports on selected problems in the study of political behavior.

0101	Antoine Banks	Seats (Total: 12)
	Th 9:30am - 12:15pm	ONLINE

GVPT849 **Readings in Government and Politics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Guided readings and discussions on selected topics in political science.

Contact department for information to register for this course.

GVPT888I **Selected Topics in Comparative Governmental Institutions; The Politics of Identity**

Credits: 3 Grading Method: Regular, Audit

An examination of special topics in comparative politics.

0101	Johanna Birnir	Seats (Total: 12)
	W 12:30pm - 3:15pm	ONLINE

GVPT898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Guided readings and discussions on selected topics in political science.

Contact department for information to register for this course.

GVPT899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

HACS ACES-Cybersecurity Fall 2020

HACS100 **Foundations in Cybersecurity I**

Credits: 2 Grading Method: Regular

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

Interdisciplinary foundational course of the ACES program. Through lectures, lab activities, and discussions, students will learn and practice various aspects of cybersecurity. Weekly technical lectures will introduce students to the operating system UNIX. Students will partner with the Division of Information Technology in a project to engage the University of Maryland community in a cyber-hygiene and cyber-ethics campaign based on the concepts learned in class.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Exper ience for Students) Living-Learning Program.

0101	Ciro Pinto-Coelho, Michel Cukier M 9:00am - 9:50am W 9:00am - 9:50am	Seats (Total: 35) ONLINE ONLINE
0201	Michel Cukier, Ciro Pinto-Coelho M 10:00am - 10:50am W 10:00am - 10:50am	Seats (Total: 35) ONLINE ONLINE
0301	Michel Cukier, Ciro Pinto-Coelho M 11:00am - 11:50am W 11:00am - 11:50am	Seats (Total: 35) ONLINE ONLINE

HACS200 **Applied Cybersecurity Foundations II**

Credits: 2 Grading Method: Regular General Education: DSSP

Prerequisite: Minimum grade of C- in HACS101. Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

Students will apply the skills learned in HACS 100 and 101 to practice cybersecurity research through team led projects employing honeypots, carrying that project through all stages - proposal, implementation, and analysis. Weekly lectures will supplement project work by addressing trends observed in honeypot attacks and protections needed, along with data collection and analysis tools, and other foundational cybersecurity concepts.

Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

0101	Michel Cukier, Zhi Xiang Lin Tu 3:30pm - 5:10pm	Seats (Total: 42) ONLINE
0201	Zhi Xiang Lin, Michel Cukier Th 3:30pm - 5:10pm	Seats (Total: 42) ONLINE

HACS201 **Introduction to UNIX**

Credits: 1 Grading Method: Regular

Restriction: Must be a first-year student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program. Credit only granted for: HACS201 or CMSC216. Additional information: Required course for students who have not completed the ACES Living-Learning Program or taken CMSC216.

Introduction to the operating system UNIX through lectures and hands-on assignments.

0101	Bertrand Sobesto	Seats (Total: 35)
	Th 5:30pm - 6:20pm	ONLINE

HACS208M Seminar in Cybersecurity; Project Management Techniques for IT Professional

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

0101	Firoozeh Rahimian	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

HACS208N Digital Forensics

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

0101	Marcelle Lee	Seats (Total: 24)
	W 4:00pm - 6:45pm	ONLINE
	Must be a student in the ACES Honors Program	

HACS208P Beyond Technology, the Policy Implications of Cyberspace

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

0101	Charles Harry	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

HACS279 **Undergraduate Research in Cybersecurity**

(Perm req)

Credits: 1-3 Grading Method: Regular

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

Contact department for information to register for this course.

HACS287 **Undergraduate Research in Cybersecurity**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program; and permission of UGST-HCOL-ACES Cybersecurity Program.

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

Contact department for information to register for this course.

HACS297 **Cybersecurity Experience Reflection**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program; and permission of UGST-HCOL-ACES Cybersecurity Program.

Cybersecurity experience is defined as an experiential learning activity either with a University of Maryland entity (such as the Division of Information Technology, the ACES competition team or in an ACES outreach program), or with an external organization that will provide valuable, hands-on experience to supplement the knowledge learned in the other ACES coursework.

Permission of department required.

0101	Cassie Harrington	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ONLINE

HACS408L **Advanced Seminar in Cybersecurity; Analytical and Forensic Techniques for Cybersecurity**

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program.

0101	Mark Haney	Seats (Total: 26)
	TuTh 11:00am - 12:15pm	ONLINE

HACS408O **Advanced Seminar in Cybersecurity; IoT Security**

(Perm req)

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program and course will need a permission stamp for students to register.

0101	Priyanka Ranade	Seats (Total: 26)
	W 5:00pm - 7:45pm	ONLINE

HACS479 **Undergraduate Research in Cybersecurity**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

Contact department for information to register for this course.

HACS498 **Cybersecurity Group Problem Solving**

(Perm req)

Credits: 3 Grading Method: Regular

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in team problem solving activities in order to gain greater insight into a specific area within cybersecurity and to obtain an appreciation for the subtleties and difficulties associated with these activities in order to prepare students for graduate school and the workforce. Students engage in a semester long problem solving or development project under the mentorship of a industry specialist and with the guidance of university faculty. Through the exercise the students will develop teamwork experience and professional communication skills in addition to experience of the project itself. The project might be evaluation, creation, testing or analysis of some area of cybersecurity as needed by the mentor-sponsor. A contract of what will be accomplished is required must be agreed upon by the mentor, the student and the ACES leadership before the project can begin.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program.

0201	Frank Pogoda Contact instructor or department for details.	Seats (Total: 10)
0301	Joseph Dougherty Contact instructor or department for details.	Seats (Total: 10)

HDCC Design Cultures and Creativity Fall 2020

HDCC105 **Introduction to Design Cultures and Creativity I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Design Cultures and Creativity Honors College Living/Learning program.

History, concepts, and technologies of creative design expression, coupled with an introduction to development for particular platforms and devices.

0101	Jason Farman TuTh 4:00pm - 5:15pm	Seats (Total: 70) ONLINE

HDCC201 **Capstone Proposal Through Design Thinking**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HDCC105 and HDCC106. Restriction: Must be in the Design Cultures and Creativity Honors College Living/Learning program.

Engages principles of design thinking to prepare second-year students in the Design Cultures and Creativity (DCC) program to create a proposal for their spring Capstone Project.

0101	DB Bauer Tu 5:00pm - 5:50pm	Seats (Total: 23) ONLINE
0201	DB Bauer W 5:00pm - 5:50pm	Seats (Total: 23) ONLINE
0301	DB Bauer W 6:00pm - 6:50pm	Seats (Total: 23) ONLINE

HDCC208C **Seminar in Digital Cultures and Creativity; Sound Cultures and Practices**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

0101	Shannon Collis M 4:00pm - 6:30pm	Seats (Total: 12) ONLINE

HDCC208N **Seminar in Digital Cultures and Creativity; Innovations in Images and Technology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

Must be in the Digital Cultures and Creativity Honors College Living/Learning program. Prerequisite: HDCC105 and HDCC106.

0101	Evan Golub MW 2:30pm - 3:45pm	Seats (Total: 13) ONLINE

HDCC208O **Seminar in Digital Cultures and Creativity; Critical Data Modeling**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

0101	Jessica Lu	Seats (Total: 12)
	TuTh 12:30pm - 1:45pm	ONLINE

HDCC208U **Seminar in Digital Cultures and Creativity; Art for Earthly Survival**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

0101	Eva Peskin	Seats (Total: 12)
	TuTh 3:30pm - 4:45pm	ONLINE

HDCC208Y **Seminar in Digital Cultures and Creativity; The History of the Book and the Future of Reading**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

0101	Kari Kraus	Seats (Total: 12)
	Tu 5:00pm - 7:30pm	ONLINE

HDCC379 **Digital Cultures and Creativity Independent Study**

(Perm req)

Credits: 3 | Grading Method: Regular

Involves research and/or creative scholarship directed by individual DCC faculty outside of the formal classroom structure.

0101	Jessica Lu	Seats (Total: 7)
	Contact instructor or department for details.	

HEBR Hebrew Fall 2020

HEBR106 **Intensive Elementary Hebrew I**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Assessment (FLPA) score. Credit only granted for: HEBR111 or HEBR106.

An intensive study of fundamentals of Hebrew reading, writing, listening and Israeli culture. Covers present tense in all verb categories, basic syntax and builds vocabulary.

0101	Avital Karpman	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE
0201	Avital Karpman	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

HEBR112 **Elementary Hebrew II**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HEBR111; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed HEBR103; and must not have completed HEBR104. Credit only granted for: (HEBR103 and HEBR104) or HEBR112.

Continuation of HEBR 111.

Contact department for information to register for this course.

HEBR206 **Intermediate Intensive Hebrew I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed HEBR107 OR HEBR112; or must have appropriate Foreign Language Placement Assessment(FLPA) score. Restriction: Must not be a fluent/native speaker of Hebrew. Credit only granted for: HEBR206 or HEBR211.

Provides a comprehensive review of the fundamentals of Hebrew grammar and oral skills, and introduces new skills in future tense verb conjugation, and communication in reading, writing, listening and speaking.

0101	Avital Karpman	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

HEBR212 **Intermediate Hebrew II**

Credits: 6 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: HEBR211; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not have completed HEBR203; and must not have completed HEBR204. Credit only granted for: (HEBR203 and HEBR204) or HEBR212.

Continuation of HEBR211.

Contact department for information to register for this course.

HEBR249M **Special Topics in Hebrew Studies; Israeli Music**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

A broad range of cultural and societal topics pertaining to the communication of Hebrew.

Prerequsite - HEBR207 or HEBR212 or equivalent background experience in the language. Please contact Dr. Avital Karpman at akarpman@umd.edu for placement information. An examination of important Israeli musical artists and genres and their impact on Israeli society and culture. Taught in Hebrew.

0101	Aliza Sandalon	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

HEBR298B **Introduction to the Hebrew Bible/Old Testament**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Cross-listed with: JWST262, ENGL262. Credit only granted for: JWST262, HEBR293B, or ENGL262.

Origins of the Hebrew Bible (Old Testament), with attention to literary formations, archaeology, and social-political settings. Explorations of major questions, including who wrote the Bible, and when; relationships of the biblical tradition to the mythology and religious structures of ancient Israel's near eastern neighbors; and dynamics of politics, religious leadership, and law.

0101	Matthew Suriano	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

HEBR313 **Conversation and Composition I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: HEBR212; or students who have taken courses with comparable content may contact the department.

A practical language course recommended for all students continuing with Hebrew. Review of grammar and composition. Selected readings. Oral and written exercises.

0101	Aliza Sandalon	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

HEBR369A **Special Topics in Study Abroad III; Hebrew Lower Advanced**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HEBR369C **Special Topics in Study Abroad III; Hebrew Upper Advanced**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HEBR369D **Special Topics in Study Abroad III; Hebrew Upper Intermediate**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HEBR386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor; and junior standing or higher.

Contact the department to obtain section numbers.

Contact department for information to register for this course.

HEBR499 **Independent Study in Hebrew**

(Perm req)

Credits: 1-3 Grading Method: Regular

Independent study under faculty supervision.

Contact the department to obtain section numbers.

Contact department for information to register for this course.

HEIP Entrepreneurship and Innovation Fall 2020

HEIP240 **Exploring International Entrepreneurship and Innovation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Restriction: Must be an EIP student in good-standing.

An introduction to the opportunities and challenges of entrepreneurship and innovation from an international perspective.

0101	Jay Smith TuTh 12:30pm - 1:45pm	Seats (Total: 36) ONLINE
0201	Jay Smith TuTh 3:30pm - 4:45pm	Seats (Total: 55) ONLINE

HESI Higher Ed, Student Affairs, and International Ed Policy Fall 2020

HESI217 **Introduction to Student Leadership**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Restriction: Freshman standing; or sophomore standing.

Introduction to leadership theories, concepts, and skills. Completion of personal and leadership self-assessments, values exploration, and small group application.

Students must pay a $32 materials fee.

0201	Genevieve Hiltebrand TuTh 2:00pm - 3:15pm	Seats (Total: 25) ONLINE
0301	Noel Kuriakos MW 11:00am - 12:15pm	Seats (Total: 25) ONLINE
0401	Ashley Hixson MW 2:00pm - 3:15pm	Seats (Total: 25) ONLINE

FC01	Ashley Hixson TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE
FC02	Noel Kuriakos MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 20) ONLINE

HESI220 **Adaptive Strategies for Multicultural Leadership and Dialogue**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

Restriction: Must not have completed BSCV301; and junior standing or lower. Credit only granted for: EDCP318L or HESI220. Formerly: EDCP318L.

As U.S. society becomes increasingly complex along multiple and continually evolving dimensions of individual and group identities, successful leaders will benefit from learning adaptive strategies and practices that will help them to navigate this complexity and adapt effectively in a climate of constant change. This class will focus on specific strategies, concepts, and insights for successful leadership and dialogue in twenty-first century U.S. multicultural society.

0101	Benjamin Beltran, Nicole Mehta TuTh 3:30pm - 4:45pm	Seats (Total: 25) ONLINE

HESI310 **Transfer2Terp Learning Community: Applying Your Strengths at the University of Maryland and Beyond**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Restriction: Priority will be given to students transferring from Maryland Community Colleges; or permission of EDUC-Counseling, Higher Education and Special Education department.

Students will identify their strengths and learn how to apply them both in and outside of the classroom. Students will work side by side with the faculty and staff in the Adele H. Stamp Student Union to learn about their strengths while applying them to leadership positions.

0101	Fatimah Ali MW 11:00am - 12:15pm	Seats (Total: 18) ONLINE
0201	Gabriela Gillespie TuTh 11:00am - 12:15pm	Seats (Total: 18) ONLINE

0301	Susan Canady TuTh 12:30pm - 1:45pm	Seats (Total: 18) ONLINE	

HESI315 **Student Leadership in Groups and Organizations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HESI217. Credit only granted for: HESI315 or EDCP315. Formerly: EDCP315.

Acquiring and integrating leadership knowledge within group and organizational contexts so that students can navigate organizational environments and apply leadership in diverse communities of practice and career contexts.

Email leadershipstudies@umd.edu for permission to enroll. Students must pay a $15 materials fee.

0301	Shakia Asamoah MW 11:00am - 12:15pm	Seats (Total: 20) ONLINE	
0501	Genevieve Hiltebrand TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE	

HESI318N **Applied Contextual Leadership; Leadership in Collaborative Learning Groups**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

Restricted to students selected to participate in the Guided Study Sessions through the Counseling Center.

0101	Danielle Pafe Th 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Lab
0201	Danielle Pafe W 5:00pm - 6:15pm Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Lab

HESI320 **Social Action Seminar**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: HESI217. Restriction: Limited to Minor in Leadership Studies students.

The use of leadership theories to inform the practice of addressing social issues in society, on campus, or within the surrounding community. Students will: identify a current and compelling social issue; explore the historical, social, and political aspects of social issues; identify and select applicable leadership theories to confront the social issue; create and develop a plan that integrates leadership theories and the social issue; and implement and evaluate the overall social action project.

Restricted to students in the Leadership Studies Program. Contact leadershipstudies@umd.edu with questions.

0101	Melissa Rocco	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

HESI417 **Advanced Leadership Seminar**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HESI217; or students who have taken courses with comparable content may contact the department. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Credit only granted for: EDCP417 or HESI417.

Students will analyze and synthesize the concept of leadership using cultural, ethical, sociological, historical perspectives. Exploration and reflection of personal values, decision making, in-depth analysis on various leadership activities. Theories will be emphasized.

Capstone course for students in the Leadership Studies Program. Contact leadershipstudies@umd.edu for permission to enroll.

0101	Craig Slack, Shakia Asamoah	Seats (Total: 15)
	F 9:00am - 11:45am	ONLINE

HESI418D **Special Topics in Leadership: Leadership and Ethnicity**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

This course will examine the concept of leadership from the standpoint of race, ethnicity, and culture. Specifically, we will explore the concept and differing meanings of leader and leadership within racial/ethnic communities in the United States. Issues of leaders and leadership will be examined as influenced by political, cultural, and historic events. The course will place particular emphasis on colleges and universities as a microcosm of the larger society and as a cultural site for exploring and assessing issues of race, ethnicity, diversity and leadership.

0101	Brandon Dula	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

HESI418F **Special Topics in Leadership: Jewish Leadership**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

This course will offer students the opportunity to critically examine leadership and leadership identity development in relation to Jewish culture and identity. We will also explore how Jewish culture and ethnicity influence leadership styles and the role that leadership has played within Jewish history.

0101	Ari Israel	Seats (Total: 35)
	M 2:00pm - 4:45pm	ASY 2203

HESI498 **Special Problems in Higher Education, Student Affairs, and International Education Policy**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Available only to HESI students who have formal plans for individual study of approved problems.

Contact department for information to register for this course.

HESI671 **Intergroup Dialogue Facilitation Practicum**

Credits: 3 Grading Method: Regular

Prerequisite: EDCP616 and HESI771; or permission of instructor. Restriction: Limited to HESI Student Affairs Concentration students only. Credit only granted for: EDCP671 or HESI671. Formerly: EDCP671.

Developing knowledge and skills for facilitating intergroup dialogues. Using the principles and content of intergroup dialogues to create scenarios for the practice of listening, understanding, and taking action under theories of social justice.

0101	Jazmin Pichardo, Alison Mojto	Seats (Total: 13)
	M 4:15pm - 7:00pm	ONLINE

HESI672 **Individual and Organizational Assessment in Student Affairs**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCP672 or HESI672. Formerly: EDCP672.

An examination of the scholarship and practice of assessment of college student learning and developmental outcomes as well as organizational practices that contribute to those outcomes.

0101	Kristan Skendall W 4:15pm - 7:00pm	Seats (Total: 15) ONLINE

HESP Hearing and Speech Sciences Fall 2020

HESP120 **Introduction to Linguistics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, DSSP

Additional information: HESP120 is required for HESP majors. HESP majors may not substitute LING200.

An introduction to the scientific study of natural language with focus on the basic concepts of phonology, syntax, semantics and pragmatics, with subsequent attention to the applied aspects of linguistic principles.

0101	Melissa Licata, Karen Miranda Class time/details on ELMs	Seats (Total: 45) ONLINE
0201	Michelle Morrison TuTh 2:00pm - 3:15pm	Seats (Total: 45) ONLINE
FC01	Dominique Mwepu TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 40) ASY 2203

HESP150 **Introduction to Language Science**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Language science is the scientific study of how humans acquire, use, comprehend, and produce language. Most people in all societies learn and use their native language or languages with apparent ease - but don't be fooled: languages are highly complex, and speaking and understanding language requires some amazing feats of mental acrobatics. Thus there are many opportunities for difficulties with language, which is the focus of our field. Understanding difficulties with speech, language, and hearing require first understanding how processing works when language is successful - the psychological (behavioral) and neurobiological (brain) factors that enable people to learn and use language despite its intricacies, the structure and properties of language itself, and how knowledge of language is acquired, represented, and processed in the mind and brain.

PDH1	Kristina Kubistal-Meeks Tu 6:30pm - 9:00pm	Seats (Total: 24) ONLINE
	Restricted to students in the Hearing and Speech Sciences In The Evening program.	

HESP202 **Introduction to Hearing and Speech Sciences**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introduction to communication sciences and disorders; a survey of the bases of normal speech, language and hearing ability, major forms of communicative disorders and their treatment.

0101	Kathleen Skinker TuTh 11:00am - 12:15pm	Seats (Total: 100) ONLINE

HESP214 **Should I Buy INTO That? Comparing Media Claims with Scientific Evidence from Brain & Behavior Research**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Millions of dollars are spent each year advertising products that "make you smarter" or "learn a foreign language faster" or "increase your memory", etc. But are these statements true? Can they be backed up? Learn how to critically evaluate media claims of new discoveries in brain and behavior. Read popular-press articles, listen to podcast episodes and review commercial products that claim to be based on science. Then, learn how to find out if the claims are true.

0101	Jared Novick TuTh 11:00am - 12:15pm	Seats (Total: 45) ONLINE
FC02	Alison Robey Class time/details on ELMs	Seats (Total: 34) ONLINE
	Restricted to students in Freshmen Connection.	

HESP300 **Introduction to Psycholinguistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP202; or permission of BSOS-Hearing & Speech Sciences department. Recommended: HESP120.

An introduction to current theories of language and an investigation of their relationship to human communication behavior. Survey of the experimental literature relating to this question.

0101	Jared Novick	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	ONLINE

HESP305 **Anatomy and Physiology of the Speech Mechanism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP202; or permission of BSOS-Hearing & Speech Sciences department.

Anatomy, physiology, and neurology of speech mechanism.

0101	Tammatha O'Brien	Seats (Total: 52)
	TuTh 11:00am - 12:15pm	ONLINE

HESP311 **Anatomy, Pathology and Physiology of the Auditory System**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP202; or permission of BSOS-Hearing & Speech Sciences department.

Gross anatomy of the ear and pathways for transmission of sound energy through the peripheral and central auditory system. Causes, development and effects of pathological conditions contributing to temporary or chronic hearing impairments.

0101	Christina Shields	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	ONLINE

HESP386 **Experiential Learning**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Restriction: Junior standing or higher; and permission of BSOS-Hearing & Speech Sciences department.

Students will have the opportunity observe and/or participate in therapy activities provided by a speech-language pathologist or audiologist in this experiential learning course.

Contact department for information to register for this course.

HESP388 **Undergraduate Research Externship**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Off-campus research internship with departmental affiliates at National Institutes of Health and regional universities. Contact department chairman for openings and descriptions of eligible placements.

Contact department for information to register for this course.

HESP389 LEAP Classroom Internship

Credits: 1-3 Grading Method: Regular

Participation in a language-based, literacy-rich preschool classroom for children with speech-language disorders. Students will learn behavior management techniques, curriculum planning and implementation, facilitation of play among children, data collection and teaching srategies.

Contact department for information to register for this course.

HESP400 Speech and Language Development in Children

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP300; or permission of BSOS-Hearing & Speech Sciences department. Recommended: LING200 or HESP120. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

Analysis of the normal processes of speech and language development in children.

0101	Kathleen Skinker TuTh 2:00pm - 3:15pm	Seats (Total: 45) ONLINE
PDH1	Tonya Williams-Walker Th 6:30pm - 9:00pm	Seats (Total: 50) ONLINE
	Restricted to students in the Hearing and Speech Sciences In The Evening program.	

HESP403 Introduction to Phonetic Science

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP305; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

An introduction to physiological, acoustic and perceptual phonetics; broad and narrow phonetic transcription; current models of speech production and perception.

0101	Margaritis Fourakis TuTh 12:30pm - 1:45pm	Seats (Total: 45) ONLINE

HESP411 **Introduction to Audiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP311; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

An introduction to the field of audiology. Evaluation and remediation of hearing handicaps.

0101	Samira Anderson TuTh 3:30pm - 4:45pm	Seats (Total: 50) HJP 0226
PDH1	Christopher Zalewski M 6:00pm - 8:30pm	Seats (Total: 15) ONLINE
	Restricted to students in the Hearing and Speech Sciences In The Evening program.	

HESP413 **Aural Rehabilitation/Habilitation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HESP411. Restriction: Sophomore standing or higher.

The fundamental aspects of aural rehabilitation therapy for both adults and children are introduced to students. Class time will consist of lectures, discussions, and hands-on activities.

PDH1	Gavin Mahoney W 6:00pm - 8:30pm	Seats (Total: 25) ONLINE
	Restricted to students in the Hearing and Speech Sciences In The Evening program.	

HESP415 **Principles and Methods in Speech-Language Pathology**

Credits: 2 Grading Method: Regular

Prerequisite: HESP400. Restriction: Must be in Hearing and Speech Sciences program.

The principles and methods required to provide treatment of speech and language disorders to children and adults. Topics include writing goals and objectives, programming,teaching strategies,session design, data collection, behavior modification and counseling.

0101	Eliza Thompson	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

HESP416 **Principles and Methods in Audiology**

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in HESP411. Restriction: Must be in Hearing and Speech Sciences program; and permission of BSOS-Hearing & Speech Sciences department.

Relate previous knowledge of anatomy/physiology and pathologies of the auditory system and integrate this information into clinical application.

0101	Lisa Rickard	Seats (Total: 25)
	W 3:00pm - 4:45pm	TWS 1310

HESP422 **Neurological Bases of Human Communication**

Credits: 3 Grading Method: Regular

Prerequisite: HESP305; or permission of instructor. Credit only granted for: HESP498 or HESP422.

Basic neurology as it pertains to anatomy and physiology substrates of speech and language.

0101	Kristin Slawson	Seats (Total: 50)
	TuTh 2:00pm - 3:15pm	ONLINE

HESP468H **Professional Development in Research and Academia; Honors Seminar: Professional Development**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

The purpose of this seminar is to complement your honors project with practical advice on how to navigate successful careers in research and academia. As you progress through your undergraduate years (especially if you work in a lab), you will likely make several unofficial observations about life as a graduate student, postdoc, or professor, and overhear conversations that include new terminology that may be confusing (e.g., research mentorship, grants, conference abstract, tenure). This can create a mysterious aura around what it is like to obtain your PhD and work in academia generally. In this class, we will cover tips and skills that are often passed along informally in the lab; but here, we will discuss these issues overtly from a range of perspectives, experiences, and best practices.

0101	Jared Novick, Matthew Goupell	Seats (Total: 15)
	F 12:00pm - 1:00pm	ONLINE

HESP469 **Honor Thesis Research**

Credits: 1-3 Grading Method: Regular

Student will develop thesis proposal, conduct research, analyze results, develop and defend final written document.

Contact department for information to register for this course.

HESP469A **Honor Thesis Research**

Credits: 1-3 Grading Method: Regular

Student will develop thesis proposal, conduct research, analyze results, develop and defend final written document.

Contact department for information to register for this course.

HESP469B **Honor Thesis Research**

Credits: 1-3 Grading Method: Regular

Student will develop thesis proposal, conduct research, analyze results, develop and defend final written document.

Contact department for information to register for this course.

HESP498 **Seminar**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics in human communication and its disorders.

Contact department for information to register for this course.

HESP499 **Independent Study; Topics in the Hearing and Speech Sciences**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

A directed study of selected topics pertaining to human communication and its disorders.

Contact department for information to register for this course.

HESP499H **Independent Study**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

A directed study of selected topics pertaining to human communication and its disorders.

Contact department for information to register for this course.

HESP600 **Instrumentation in Hearing and Speech Sciences**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Clinical Audiology: Au.D. or Ph.D. (Doctoral) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Types and principles of operation of electronic equipment used in the hearing and speech sciences.

Offered Fall only.

0101	Lindsay DeVries	Seats (Total: 10)
	W 3:30pm - 6:00pm	TWS 1320

HESP603 **Seminar in Cultural and Linguistic Diversity in Communication Disorders**

Credits: 1 Grading Method: Regular

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of Instructor. Additional information: Course meets over four semesters for the duration of the Masters of Speech-Language Pathology program.

Overview of cultural and linguistic diversity (CLD) in general, and the impact of CLD on communication, communication disorders, and the professional practice of Speech-Language Pathology

0101	Eusebia Mont	Seats (Total: 25)
	F 1:00pm - 2:30pm	ONLINE

HESP606 **Basic Hearing Measurements**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: HESP411; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Clinical Audiology: Au.D. or Ph.D. (Doctoral) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Theoretical principles, methodology, and interpretation of routine audiometric tests, including pure tone, speech, and acoustic immittance measures. Modification of procedures for special populations. Equipment calibration and mass hearing screening programs.

0101	Sandra Gordon-Salant	Seats (Total: 9)
	Th 3:30pm - 6:00pm	LEF 2205

HESP610 **Language Disorders in Adults**

Credits: 2

Grading Method: Regular, Audit

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of instructor.

Etiology, diagnosis and management of language problems of adults associated with aging, brain injury and degenerative conditions.

0101	Yasmeen Shah	Seats (Total: 30)
	Meets October 19, 2020 - December 14, 2020	
	Th 9:00am - 12:20pm	ONLINE

HESP613 **Autism Spectrum Disorders**

Credits: 2

Grading Method: Regular, Audit

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of instructor. Credit only granted for: HESP639A or HESP613. Formerly: HESP639A.

Etiology, diagnosis and management of autism spectrum disorders.

0101	Vivian Sisskin	Seats (Total: 31)
	Meets October 19, 2020 - December 14, 2020	
	Tu 9:30am - 12:50pm	Location: TBA

HESP616 **Language Disorders in the Pre-school Age**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: HESP400; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Theoretical, empirical and clinical perspectives on language disorders in children from infancy through pre-school age.

0101	Nan Ratner	Seats (Total: 20)
	Meets August 31, 2020 - October 17, 2020	
	Tu 9:30am - 12:50pm	ONLINE

HESP624 **Voice Disorders**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Restriction: Permission of BSOS-Hearing & Speech Sciences department; or must be in Hearing and Speech Sciences: M.A. (Master's) program.

Etiological characteristics, assessment and treatment of phonatory disorders in children and adults.

0101	Nancy Solomon	Seats (Total: 20)
	Meets September 1, 2020 - October 15, 2020	
	TuTh 7:00pm - 8:15pm	ONLINE
	Class time/details on ELMs	ONLINE

HESP626 **Language disorders in school-aged children and adolescents**

Credits: 2 Grading Method: Regular, Audit

Etiology, assessment and treatment of communication and learning problems in school age children and adolescents

0101	Nan Ratner	Seats (Total: 20)
	Meets October 19, 2020 - December 14, 2020	
	TuTh 7:00pm - 8:15pm	ONLINE
	Class time/details on ELMs	ONLINE

HESP630 **Electrophysiological Measurements**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: HESP606. Restriction: Must be in Clinical Audiology: Au.D. or Ph.D. (Doctoral) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Principles and techniques of physiological and electrophysiological measures of the audio-vestibular mechanisms.

Offered fall only.

0101	Samira Anderson	Seats (Total: 10)
	W 3:30pm - 6:00pm	SQH 1119

HESP638 **Research Practicum**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Analysis, synthesis and integration of knowledge related to current research or clinical issues in human communication and its related disorders.

Contact department for information to register for this course.

HESP645 **Pediatric Audiology**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: HESP606. Restriction: Must be in Clinical Audiology: Au.D. or Ph.D. (Doctoral) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Evaluation and treatement of hearing-impaired children.

Offered Fall only.

0101	Sarah Sohns M 6:00pm - 8:30pm	Seats (Total: 10) ONLINE	

HESP648A **Clinical Practice in Speech: Diagnostic Procedures**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Permission of instructor.

Supervised training in the application of clinical methods in the diagnosis of speech disorders.

2101	Vivian Sisskin F 9:00am - 11:50am	Seats (Total: 5) ONLINE	Lab
2301	Eliza Thompson F 9:00am - 11:50am	Seats (Total: 5) ONLINE	Lab
2701	Jose Ortiz F 9:00am - 11:50am	Seats (Total: 5) ONLINE	Lab
2801	Eusebia Mont F 9:00am - 11:50am	Seats (Total: 5) ONLINE	Lab
3601	Kristin Slawson F 9:00am - 11:50am	Seats (Total: 5) ONLINE	Lab

3701	Kathryn Dow-Burger	Seats (Total: 5)	
	F 9:00am - 11:50am	ONLINE	Lab

HESP648B **Clinical Practice in Speech: Therapeutic Procedures**

(Perm req)

Credits: 1-2 Grading Method: Regular

Prerequisite: HESP648A. Restriction: Permission of instructor. Repeatable to 6 credits.

Supervised training in the application of clinical methods in the treatment of speech disorders.

2101	Vivian Sisskin	Seats (Total: 5)	
	Th 12:30pm - 1:20pm	ONLINE	Lab
	W 1:00pm - 2:30pm	ONLINE	Lab
2301	Eliza Thompson	Seats (Total: 5)	
	Th 12:30pm - 1:20pm	ONLINE	Lab
2701	Jose Ortiz	Seats (Total: 5)	
	Th 12:30pm - 1:20pm	ONLINE	Lab
	F 12:00pm - 12:50pm	ONLINE	Lab
2801	Eusebia Mont	Seats (Total: 5)	
	M 9:30am - 10:50am	ONLINE	Lab
3601	Kristin Slawson	Seats (Total: 5)	
	Th 12:30pm - 1:20pm	ONLINE	Lab
3701	Kathryn Dow-Burger	Seats (Total: 5)	
	Th 12:30pm - 1:20pm	ONLINE	Lab
	W 10:00am - 10:50am	ONLINE	Lab

HESP649A **Clinical Practice in Audiology: Diagnostic Procedures**

(Perm req)

Credits: 1-2 Grading Method: Regular

Restriction: Permission of instructor. Repeatable to 6 credits.

Supervised training in the application of clinical methods in the diagnosis of hearing disorders.

Contact department for information to register for this course.

HESP649B **Clinical Practice in Audiology; Aural Rehabilitation**

(Perm req)

Credits: 1-2 Grading Method: Regular

Supervised training in the application of clinical methods in the diagnosis and treatment of hearing disorders.

Contact department for information to register for this course.

HESP700 **Hearing Aids**

Credits: 3 Grading Method: Regular, Audit

Principles, methods and procedures for selection, fitting, calibration and management of amplification systems for hearing-impaired children and adults.

0101	Eric Hoover	Seats (Total: 10)
	Tu 5:00pm - 7:30pm	Location: TBA

HESP702 **Diagnostic Procedures in Speech-Language Pathology**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Diagnostic tools and methods in the analysis of speech-language disorders in children and adults.

0101	Colleen Worthington	Seats (Total: 30)
	Meets August 31, 2020 - October 17, 2020	
	Th 9:00am - 12:20pm	ONLINE

HESP708 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Individual research projects under guidance of a faculty member.

Contact department for information to register for this course.

HESP710 **Industrial and Environmental Noise Problems**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor.

Evaluation and control of noise hazards. Effects of noise on man. Medico-legal aspects of noise-induced hearing impairment.

0101	Eric Hoover	Seats (Total: 20)
	M 5:00pm - 7:30pm Contact instructor or department for details.	ONLINE

HESP712 **Cochlear Implants and Other Implantable Technologies**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in HESP700, HESP701, and HESP722; or permission of instructor.

Comprehensive presentation of cochlear implant design and processing, medical/surgical aspects, evaluation, programming, outcomes in children and adults, and post stimulation care. The role of the audiologist as a member of the cochlear implant team will be emphasized. Current and emerging trends in other implantable technologies also will be covered.

0101	Nicole Nguyen	Seats (Total: 10)
	M 2:00pm - 4:30pm	SKN 0104

HESP722 **Psychoacoustics**

Credits: 3 Grading Method: Regular, Audit

Auditory perception and auditory processing in normal and impaired hearing.

0101	Matthew Goupell	Seats (Total: 15)
	Tu 4:30pm - 7:00pm	ONLINE

HESP728 **Advanced Clinical Practice in Speech; Advanced Graduate Laboratory Practicum in Speech-Language Pathology**

(Perm req)

Credits: 1-8 Grading Method: Regular

Clinical internship in selected off-campus facilities.

Contact department for information to register for this course.

HESP729 **Advanced Clinical Practice in Audiology; Advanced Graduate Laboratory Practicum in Audiology**

(Perm req)

Credits: 1-8 Grading Method: Regular

Clinical internship in selected off-campus facilities.

1301	Nicole Nguyen Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 10)
3201	Nicole Nguyen Contact instructor or department for details.	Seats (Total: 20)

HESP788 **Graduate Research Externship**

Credits: 1-3 Grading Method: Regular, Audit

Off-campus research internship with departmental affiliates at National Institutes of Health and other regional universities. Contact department chairman for available placements, requirements and openings.

Contact department for information to register for this course.

HESP799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

HESP829 **Clinical Internship Residency**

Credits: 1-9 Grading Method: Regular, Audit

Off-Campus, full-time (30-40 hours/week) clinical externship in Audiology at regional and national institutions.

1301	Nicole Nguyen Contact instructor or department for details.	Seats (Total: 30)
3201	Nicole Nguyen Contact instructor or department for details.	Seats (Total: 10)

HESP849 **Capstone Research Project I**

Credits: 2 Grading Method: Regular

First of two-course sequence leading to the final research requirement for the Doctor of Audiology (Au.D.) degree; involves individual study and/or supervised lab work with mentor, preparation of research proposal (including IRB protocol if required), and attendance at Capstone Research Project Workshop.

Contact department for information to register for this course.

HESP859 **Capstone Research Project II**

Credits: 1-2 Grading Method: Regular

Second of two-course sequence leading to the final research requirement for the Doctor of Audiology (Au.D.) degree; involves final data collection, analysis and presentation of results or completion of scholarly paper under the direction of the faculty mentor.

Contact department for information to register for this course.

HESP889 **Doctoral Candidacy Research**

Credits: 1-3 Grading Method: Regular

Doctoral candidacy paper research

Contact department for information to register for this course.

HESP898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

HESP899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

HHUM Honors Humanities Fall 2020

HHUM105 **Honors Humanities: Introduction to the Arts and Humanities**

Credits: 3 Grading Method: Regular CORE: HL General Education: DSHU

Restriction: Must be an entering freshmen in the Honors Humanities Program. Credit only granted for: ARHU105 or HHUM105. Formerly: ARHU105.

Introduction to the university, the different fields of the arts and humanities, and the history of how the university and the humanities have evolved across the world from ancient times to the present. Primary emphasis on reading and discussion of literary artifacts to assess the meaning and social status of the arts and humanities in the past and their personal and social value for the future.

0101	Randy Ontiveros	Seats (Total: 19)	
	MW 1:00pm - 1:50pm	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion

0102	Randy Ontiveros MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 19) ONLINE ONLINE	Discussion
0103	Randy Ontiveros MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 19) ONLINE ONLINE	Discussion
0104	Randy Ontiveros MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 19) ONLINE ONLINE	Discussion

HHUM205 **Second Year Seminar in Honors Humanities**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DVUP

Credit only granted for: ARHU205 or HHUM205. Formerly: ARHU205.

Seminar on basic issues and methodologies in the humanities and arts.

0101	Kathleen Spanos TuTh 3:30pm - 4:45pm *Dancing in the World.*	Seats (Total: 19) ONLINE	
0102	Karin Rosemblatt MW 2:00pm - 3:15pm *History, Memory and Human Rights in Latin America.*	Seats (Total: 16) ANA 0120	
0103	Sahar Khamis TuTh 2:00pm - 3:15pm *Digital Discourses in the Muslim World.*	Seats (Total: 25) ONLINE	
0104	Lara Payne TuTh 11:00am - 12:15pm *World YA Literature*	Seats (Total: 25) ESJ 1215	

HHUM328 **Internship in Honors Humanities**

Credits: 1-3 Grading Method: Regular

Supervised service-learning in Honors Humanities.

0101	Randy Ontiveros Class time/details on ELMs	Seats (Total: 12) ONLINE
0102	Randy Ontiveros Class time/details on ELMs	Seats (Total: 12) ONLINE
0103	Randy Ontiveros Class time/details on ELMs	Seats (Total: 12) ONLINE

HHUM329 **Undergraduate Teaching Assistantship**

Credits: 1-3 Grading Method: Regular

Supervised pedagogical service-learning in the Honors Humanities curriculum.

0101	Randy Ontiveros Class time/details on ELMs	Seats (Total: 8) ONLINE

HISP Historic Preservation Fall 2020

HISP600 **History, Theory, and Practice of Historic Preservation**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program.

An introduction to history, theory and practice of historic preservation covered through readings, discussions, presentations, class projects, and field trips.

0101	John Sprinkle Th 7:00pm - 9:40pm	Seats (Total: 20) ONLINE

HISP611 **Historical Research Methods**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP610 or HISP611.

Research methods used by professional historic preservationists to identify and record historic structures and sites. Emphasizes inter/multidisciplinary nature of contemporary preservation practice using archival and ethnographic evidence as a basis for establishing significance.

Department permission required.

0101	Paula Nasta W 7:00pm - 9:40pm	Seats (Total: 15) ONLINE

HISP629 **Independent Studies in Historic Preservation**

Credits: 1-3 Grading Method: Regular, Audit

Individual Instruction course.

0101	Dennis Pogue Class time/details on ELMs	Seats (Total: 1) ONLINE
0102	Donald Linebaugh Class time/details on ELMs	Seats (Total: 1) ONLINE

HISP650 **Historic Preservation Studio Workshop**

(Perm req)

Credits: 6 Grading Method: Regular, Audit

Prerequisite: HISP600; and permission of ARCH-Historic Preservation Program. Restriction: Must be in a major in ARCH-Historic Preservation Program.

Students carry out a group preservation project in a local community, from inception and problem formulation through completion. Guided carefully by a faculty team, students will conduct research, interact with communities, perform analyses, and propose solutions for an issue or problem of direct relevance to a local community and client group.

Department permission required.

0101	Jeremy Wells, Michelle Magalong TuTh 4:00pm - 6:40pm	Seats (Total: 15) ONLINE

HISP655 **American Vernacular Architecture**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP655 or HISP619V. Formerly: HISP619V.

History, theory, and practice of American vernacular architecture including a review of common building technologies, structure, and style, and focusing on methods and approaches for recording, documenting and analyzing these historic resources.

Prerequisite: permission of department. Class will meet some sessions at Bostwick House.

0101	Dennis Pogue Tu 7:00pm - 9:40pm Contact instructor or department for details.	Seats (Total: 15) ONLINE

HISP660 **Internship in Historic Preservation**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Formerly: HISP619.

Students will secure a summer internship with an organization engaged in historic preservation work (this can be a public agency, nonprofit, or private firm). The students will formulate a plan of work and a series of pedagogical goals to satisfy both the practical needs of the project and the academic requirements for the course.

0101	Dennis Pogue Class time/details on ELMs	Seats (Total: 10) ONLINE

HISP680 **Preservation Economics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP619N or HISP680. Formerly: HISP619N.

Students are introduced to a range of economic theories, methods, and issues that must be considered in the practice of historic preservation. Case studies related to community economic development, adaptive reuse, tax credit programs, project finance, and land use will be presented.

0101	Jeremy Wells M 7:00pm - 9:40pm	Seats (Total: 15) ONLINE

HISP701 **Certificate Portfolio Project**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program.

Students will gather samples of their work and craft a synthetic statement on their experiences in their HISP certificate courses (for example, picking up on themes such as community involvement, diversity of practice, affordable housing, or sustainability), and the ways in which they have integrated historic preservation into their thinking and practice in their home discipline.

Department permission required.

0101	Dennis Pogue	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

HISP710 **Final Project in Historic Preservation I**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Credit only granted for: HISP700 or HISP710. Formerly: HISP700.

An independent, applied research project investigating the preservation of a particular site or a specialized issue in historic preservation. This is part one of a two-semester sequence and involves developing the project proposal and bibliography.

Department permission required.

0101	Dennis Pogue	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

HISP711 **Final Project in Historic Preservation II**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Credit only granted for: HISP700 or HISP711. Formerly: HISP700.

An independent, applied research project invesitgating the preservation of a particular site or a specialized issue in historic preservation. This is part two of a two semester sequence and involves project research and writing.

Department permission required.

0101	Dennis Pogue	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

HIST History Fall 2020

HIST106 **American Jewish Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS, DVUP

Cross-listed with JWST141. Credit only granted for: HIST106 or JWST141.

History of the Jews in America from colonial times to the present. Emphasis on the waves of migration from Germany and Eastern Europe; the changing nature of the American Jewish community and its participation in American social, economic, and political life.

0101	Marsha Rozenblit TuTh 9:30am - 10:45am	Seats (Total: 40) ONLINE	

HIST110 **The Ancient World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

Interpretation of select literature and art of the ancient Mediterranean world with a view to illuminating the antecedents of modern culture; religion and myth in the ancient Near East; Greek philosophical, scientific, and literary invention; and the Roman tradition in politics and administration.

0101	Elizabeth Conner MW 10:00am - 10:50am W 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Elizabeth Conner MW 10:00am - 10:50am W 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Elizabeth Conner MW 10:00am - 10:50am W 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

HIST111 **The Medieval World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, DVUP

The development of Europe in the Middle Ages; the role of religious values in shaping new social, economic, and political institutions; medieval literature, art and architecture.

0101	Colleen Ho TuTh 12:30pm - 1:20pm Th 9:30am - 10:20am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Colleen Ho TuTh 12:30pm - 1:20pm Th 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion

0103	Colleen Ho TuTh 12:30pm - 1:20pm Th 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion
0104	Colleen Ho TuTh 12:30pm - 1:20pm F 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0105	Colleen Ho TuTh 12:30pm - 1:20pm F 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion
0106	Colleen Ho TuTh 12:30pm - 1:20pm F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion
FC01	Courtney Dahlke TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 27) ONLINE	

HIST113 **The Making of Modern Europe**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

Evolution of modern nation states since late medieval times. Industrial-economic structure and demography. Emergence of modern secular society.

0101	Stefano Villani TuTh 12:30pm - 1:45pm	Seats (Total: 30) ESJ 2212

HIST120 **Islamic Civilization**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHU

Cross-listed with RELS120. Credit only granted for: HIST120 or RELS120.

Introduction to society and culture in the Middle East since the advent of Islam: as a personal and communal faith; as artistic and literary highlights of intellectual and cultural life; and as the interplay between politics and religion under the major Islamic regimes.

0101	Antoine Borrut MW 9:00am - 9:50am F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0102	Antoine Borrut MW 9:00am - 9:50am F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0103	Antoine Borrut MW 9:00am - 9:50am F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion

HIST123 **Sub-Saharan Africa Since 1800**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

Overviews early mid-19th-century changes in African societies, European conquest and African resistances in the late 19th-century, colonial states and societies, African nationalisms and decolonization and the independence era. Struggles over social, economic, and political changes are emphasized.

0101	Erin Mosely MW 2:00pm - 3:15pm	Seats (Total: 40) ONLINE	

HIST132 **Fighting Slavery**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHU, SCIS

An examination of the different tools and tactics, means and methods that Americans have used to escape slavery or try to eliminate it.

0101	Richard Bell MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0102	Richard Bell MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 24) ONLINE ONLINE	Discussion

0103	Richard Bell MW 11:00am - 11:50am Th 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion
0104	Richard Bell MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0105	Richard Bell MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0106	Richard Bell MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion

HIST132C **Fighting Slavery**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHU, SCIS

An examination of the different tools and tactics, means and methods that Americans have used to escape slavery or try to eliminate it.

Restricted to students in Carillon Communities.

0101	Richard Bell MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 20) ONLINE ONLINE	Discussion

HIST133 **God Wills It! The Crusades in Medieval and Modern Perspectives**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, SCIS

Cross-listed with: RELS289D. Credit only granted for: HIST133 or RELS289D.

An examination of the identities and convictions both of the Western Europeans who participated in the Crusades and of the Easterners (Muslim, Christian, and Jewish) whom they encountered in the Holy Land. Focuses on the era of the first four great Crusades, from about 1095 to 1215. Consideration of the cultural impact of these movements on both Western Europe and the Middle East.

0101	Janna Bianchini MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Janna Bianchini MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Janna Bianchini MW 11:00am - 11:50am F 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

HIST135 **Civil Discourse or Urban Riot: Why Cities Don't (Often) Explode**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP, SCIS

Cross-listed with: JWST289E. Credit only granted for: HIST135 or JWST289E.

An examination of the mechanisms that promote peaceful co-existence in urban societies and a discussion of how and why city streets sometimes become violent.

Jointly offered with JWST289E. Credit granted for HIST135 or JWST289E.

0101	Bernard Cooperman TuTh 11:00am - 11:50am W 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Bernard Cooperman TuTh 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Bernard Cooperman TuTh 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

HIST135C **Civil Discourse or Urban Riot: Why Cities Don't (Often) Explode**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP, SCIS

Cross-listed with: JWST289E. Credit only granted for: HIST135 or JWST289E.

An examination of the mechanisms that promote peaceful co-existence in urban societies and a discussion of how and why city streets sometimes become violent.

Restricted to students in Carillon Communities.

0101	Bernard Cooperman TuTh 11:00am - 11:50am Th 5:00pm - 5:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

HIST136 **Moneyland: Business in American Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, SCIS

An exploration of American business culture and institutions from colonial times to the present with emphasis on how inherited and acquired identities (social capital) have shaped Americans' experiences as entrepreneurs, managers, workers, and consumers.

0101	David Sicilia MW 9:00am - 9:50am M 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	David Sicilia MW 9:00am - 9:50am M 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	David Sicilia MW 9:00am - 9:50am M 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0104	David Sicilia MW 9:00am - 9:50am W 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0105	David Sicilia MW 9:00am - 9:50am W 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0106	David Sicilia MW 9:00am - 9:50am W 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

HIST187 **God, Land, Power, and the People: Moral Issues in the Jewish Historical Experience**

Credits: 3 | Grading Method: Regular | General Education: DSHS, DSHU, DVUP, SCIS

Cross-listed with: JWST187. Credit only granted for: HIST187 or JWST187.

Examines the complicated relationship between theology, nationalism, sovereignty, and the ethical exercise of social control using case studies drawn from the Jewish historical experience. The universal and age-old issues implicit in the exercise of power have gained special moral force for Jews with the creation of the State of Israel, a Jewish and a democratic state with substantial non-Jewish minorities and hundreds of thousands of non-citizen subjects. Can these be reconciled? Jewish efforts over the ages and in recent times to define justice provide concrete examples through which to examine and discuss crucial abstract principles.

0101	Bernard Cooperman TuTh 3:30pm - 4:20pm F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Bernard Cooperman TuTh 3:30pm - 4:20pm F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Bernard Cooperman TuTh 3:30pm - 4:20pm F 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

HIST200 **Interpreting American History: Beginnings to 1877**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, DSHU

Credit only granted for: HIST156 or HIST200. Formerly: HIST156.

The United States from colonial times to the end of the Civil War. Establishment and development of American institutions.

0101	Robert Chiles TuTh 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Robert Chiles TuTh 11:00am - 11:50am Th 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

0103	Robert Chiles TuTh 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 24) ONLINE ONLINE	Discussion
0104	Robert Chiles TuTh 11:00am - 11:50am F 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0105	Robert Chiles TuTh 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0106	Robert Chiles TuTh 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion
FC01	Richard Bell MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 27) ONLINE	

HIST201 **Interpreting American History: From 1865 to the Present**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, DSHU, DVUP

Credit only granted for: HIST157 or HIST201. Formerly: HIST157.

The United States from the end of the Civil War to the present. Economic, social, intellectual, and political developments. Rise of industry and emergence of the United States as a world power.

0101	Howard Smead MW 12:00pm - 12:50pm M 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0102	Howard Smead MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0103	Howard Smead MW 12:00pm - 12:50pm M 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion

0104	Howard Smead MW 12:00pm - 12:50pm W 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0105	Howard Smead MW 12:00pm - 12:50pm W 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0106	Howard Smead MW 12:00pm - 12:50pm W 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0107	Howard Smead MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0108	Howard Smead MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0109	Howard Smead MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0201	Robert Chiles TuTh 12:30pm - 1:20pm F 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0202	Robert Chiles TuTh 12:30pm - 1:20pm F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0203	Robert Chiles TuTh 12:30pm - 1:20pm F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0204	Robert Chiles TuTh 12:30pm - 1:20pm F 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

0205	Robert Chiles TuTh 12:30pm - 1:20pm F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0206	Robert Chiles TuTh 12:30pm - 1:20pm F 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
FC02	Robert Chiles TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 27) ONLINE	

HIST204 **Introduction to the History of Science**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

Credit only granted for: HIST174 or HIST204. Formerly: HIST174.

An exploration of the roots of modern science from the ancient Greeks through the medieval and early modern periods. Focus on the men and women who helped to create the sciences and to change public perceptions of their disciplines.

0101	Melinda Baldwin TuTh 12:30pm - 1:45pm	Seats (Total: 40) ONLINE	

HIST208D **Historical Research and Methods Seminar; Finding Our Place: Citizenship in United States History**

(Perm req)

Credits: 3 | Grading Method: Regular

Reading and research skills and methods. Research papers will be based on the topic of the seminar.

0101	Derek Litvak Tu 9:30am - 11:20am Class time/details on ELMs	Seats (Total: 12) ONLINE ONLINE	 Discussion
0201	Derek Litvak Tu 12:30pm - 2:20pm Class time/details on ELMs	Seats (Total: 12) ONLINE ONLINE	 Discussion

HIST208E **Historical Research and Methods Seminar; Constructing, Imagining, and Narrating Pre-Modern Cities**

(Perm req) Credits: 3 Grading Method: Regular

Reading and research skills and methods. Research papers will be based on the topic of the seminar.

0101	Kader Smail W 10:00am - 11:50am Contact instructor or department for details.	Seats (Total: 12) ONLINE
0201	Kader Smail W 1:00pm - 2:50pm Contact instructor or department for details.	Seats (Total: 12) ONLINE

HIST208F **Historical Research and Methods Seminar; Monuments, Memorials, and Museums: History through Sites of Public Memory**

(Perm req) Credits: 3 Grading Method: Regular

Reading and research skills and methods. Research papers will be based on the topic of the seminar.

0101	Caroline Angle Th 11:00am - 12:50pm Contact instructor or department for details.	Seats (Total: 12) MMH 1304
0201	Caroline Angle Th 2:00pm - 3:50pm Contact instructor or department for details.	Seats (Total: 12) MMH 1304

HIST215 **Women in Western Europe to 1750**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

Credit only granted for: HIST215 or HIST219A. Formerly: HIST219A.

An exploration of the theories and rhetoric about the nature and existence of women in the West, focusing on the experience of women from the hegemony of Classical Greece to the French Revolution, an era that marks the beginning of a continuous process of change. Emphasis will be on the period between 1250 and 1750, when the Western European world was fundamentally altered in every aspect and in every level of society, culture, and government.

0101	Sabrina Baron TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE

HIST219C **Special Topics in History; Can Jews be Arabs? Identity and Crisis for the Jews of Arab Lands in Modern Times**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

Crosslisted with JWST289A. Credit only granted for HIST219C or JWST289A. Examines the complex and fraught history of the Jews of Arab lands in modern times, with a focus on questions of identity, relationship with Christian and Muslim Arabs, and the impact of Zionism and Arab nationalism.

0101	Shay Hazkani	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

HIST219E **Special Topics in History; Visual Cultures of Islam**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Crosslisted with ARTH389L, AAST298B, PERS298E, and RELS219E. Credit granted for HIST219E, ARTH389L, AAST298B, PERS298E, or RELS219E. Visual Cultures of Islam is part of the Digital Islamic Studies Curriculum (digitalislam.umich.edu). This course is taught by renowned University of Michigan instructor Christiane Gruber, an expert in the field of Islamic Art, and digitally shared with the University of Maryland. In this course, Professor Gruber explores definitions of "Islamic" art and investigates various visual cultures of Islam around the world from the 7th to the 20th century. The course meets twice a week in real time using video conferencing technology and students are able to enroll directly at Maryland for course credit.

0101	Instructor: TBA	Seats (Total: 12)
	TuTh 11:30am - 1:00pm	ONLINE

HIST219M **Special Topics in History; Archeology and History of Palestine: Neolithic to Muhammed**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Cross-listed with RELS219G. Credit granted for RELS219G or HIST219M. This class covers the archaeology and history of the Southern Levant, and surrounding regions, from before the time of the earliest cities to the arrival of Islam. Course introduces the discipline of archaeology, both in general, and as a means to investigate the important cultural, political, social, and religious developments that shaped this part of the Mediterranean world.

0101	Gregory Stoehr	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

HIST224 **Modern Military History, 1494-1815**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

Survey of global military history from the European "discovery" of the Americas to the end of the Napoleonic Wars. Explores how the creation of professional armies, advancement of weapons technology, and evolution of military-civilian relations in Europe during these three centuries sparked the "Rise of the West".

0101	Patrick Chung	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	ONLINE

HIST232 **The Historical Development of London**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

Restriction: Permission of Study Abroad Office required. Credit only granted for: GNED288 and HIST232. Formerly: GNED288.

Study Abroad in London, England. The history of London, beginning with its foundation by the Romans, continuing with the city's progressive political and cultural domination of England, the British Isles and the British Empire, and concluding with a look at the city in the 20th century. Students look at London through the eyes of contemporaries and historians while forming their own impressions of the city during course-based walking tours of the city.

Contact department for information to register for this course.

HIST234 **Invaders, Conquerors, Usurpers: A History of Pre-Modern Britain to 1485**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

British history from Roman times to the 15th century. The Anglo-Saxon, Scandinavian, and Norman invasions; the coming of Christianity; Magna Carta, the development of Parliament, legal institutions, and the Common Law; the decline of medieval kingship.

0101	Sabrina Baron	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ONLINE

HIST237 **Russian Civilization**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS

An overview of Russian history stressing the main lines of development of the Russian state and the evolution of Russian culture to the present day.

0101	Sarah Cameron	Seats (Total: 39)
	MW 2:00pm - 3:15pm	ONLINE

HIST240 **Europe in the Twentieth Century**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

Credit only granted for: HIST240 or HIST337. Formerly: HIST337.

Political, cultural, and economic developments in 20th-century Europe.

0101	Jeffrey Herf TuTh 9:30am - 10:20am F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Jeffrey Herf TuTh 9:30am - 10:20am F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Jeffrey Herf TuTh 9:30am - 10:20am F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

HIST250 **Colonial Latin America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

Cross-listed with LASC250. Credit only granted for: HIST250 or LASC250.

Introductory survey of the history of Latin America from pre-Columbian Indian cultures to the beginning of the wars for independence (ca. 1810), covering cultural, political, social, and economic developments. Major themes include conquest, colonialism, indigenous culture, African slavery, religion, race and ethnicity, and gender ideologies.

0101	Alejandro Caneque TuTh 3:30pm - 4:45pm	Seats (Total: 40) CHM 1407

HIST254 **African-American History to 1865**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DVUP

Cross-listed with: AASP298C. Credit only granted for: HIST254 or AASP298C.

Survey of the principal developments in the history and culture of the peoples of African descent in colonial North America and the United States to 1865. Examines the African past, the Atlantic slave trade, variation in slavery, the growth of free black communities, the transformations of families and cultural forms, and patterns of resistance.

Cross-listed with AASP298C. Credit will be granted for AASP298C or HIST 254.

0101	Christopher Bonner TuTh 11:00am - 12:15pm	Seats (Total: 40) ONLINE

HIST269 **Special Topics in Study Abroad II**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HIST269M **Special Topics in Study Abroad II; History of Modern Italy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HIST269Y **Special Topics in Study Abroad II; Rome: Republic and Empire**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HIST284 **East Asian Civilization I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

An interdisciplinary survey of the development of East Asian cultures. An historical approach drawing on all facets of East Asian traditional life, to gain an appreciation of the different and complex cultures of the area.

0101	Ting Zhang MW 10:00am - 10:50am M 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Ting Zhang MW 10:00am - 10:50am W 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

0103	Ting Zhang MW 10:00am - 10:50am W 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

HIST289O **Lawlessness: From Pirates to Body-snatchers, Exploring the Legitimacy of Illicit Activity**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Explores motives of and responses to the lawless behavior of pirates, body snatchers, bandits, vigilantes, smugglers and others worldwide from the 1500s to today.

Explores motives of and responses to the lawless behavior of pirates, body snatchers, bandits, vigilantes, smugglers and others worldwide from the 1500s to today.

0101	Anne Rush TuTh 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Anne Rush TuTh 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Anne Rush TuTh 11:00am - 11:50am F 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
FC01	Anne Rush TuTh 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 28) ONLINE	

HIST299 **Directed Research**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Closely guided research in primary sources for students currently enrolled in selected 100- or 200-level surveys in the Department of History.

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST319J **Special Topics in History; Confederate Monuments in Historical Perspective**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Examines the campaigns to memorialize Confederate soldiers, Confederate leaders, and the Confederate cause that filled the landscape of the U.S. South with monuments. Particular attention to the Lost Cause movement of which the monuments were a part, including the leading organizations, the multiple activities in which they were engaged, and the cultural dominance they achieved. Also considers the social, political, ideological, and racial contexts of the movement as it changed over time and the counter-memories that challenged and sometimes directly contested Confederate memorialization.

0101	Leslie Rowland	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	ONLINE

HIST319L **Special Topics in History; Islam: Learning, Piety, and Practice**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Cross-listed with PERS398C. Credit granted for HIST319L or PERS398C. History of the formation and development of major religious and intellectual currents of Islam.

0101	Ahmet Karamustafa	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

HIST319Q **Special Topics in History; The Civil War Era: America's Fiery Trial**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A political, social, cultural, economic, and military history of the Civil War Era that uses the lives of key figures such as John Brown, Jefferson Davis, Frederick Douglass, Joshua Chamberlain, Mary Chestnut, William Lloyd Garrison, Ulysses Grant, Stonewall Jackson, Robert E. Lee,Abraham Lincoln, James Longstreet, Harriet Beecher Stowe, Harriet Tubman, and William T. Sherman, to recreate the era as a lived experience.

0101	Michael Ross	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ASY 2203

HIST319R **Special Topics in History; Genghis Khan and the Mongols: Destroyers of Worlds and Patrons of Culture**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

0101	Colleen Ho TuTh 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

HIST319V **Special Topics in History; America in the 1960's**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An examination of the social, cultural, and political history of the United States in the 1960s. The course will offer a thematic approach, addressing topics such as electoral politics, the Vietnam War, the African American freedom movement, gay liberation, the women's movement, the student movement, and the counterculture.

0101	Katarina Keane MW 3:30pm - 4:45pm	Seats (Total: 40) ONLINE

HIST319W **Special Topics in History; Hollywood and Politics in the 20th Century**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with FILM329G. Credit granted for HIST319W or FILM329G. How the American film industry, American films, and the Hollywood community have interacted in the course of the 20th century.

0101	Saverio Giovacchini TuTh 3:30pm - 4:45pm	Seats (Total: 40) ONLINE

HIST326 **The Roman Republic**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST111 or HIST110; or permission of instructor.

Ancient Rome 753-44 B.C., from its founding to the assassination of Julius Caesar. Rome's conquest of the Mediterranean world, the social and political forces that brought it about, and the consequent transformation and decline of the Republic.

0101	Elizabeth Conner MW 3:30pm - 4:45pm	Seats (Total: 40) ONLINE

HIST328A **Selected Topics in History; "Forging the Tortilla Curtain": US-Mexican Borderlands**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The historical roots of the U.S.-Mexico border and borderlands landscape, 1800-present. Emphasis on the creation and militarization of the U.S.-MX border, the effects of border-making and free-enterprise on borderlands society, the development of U.S. immigration policy at the U.S.-MX border, the challenges of globalization, and the Mexican migration experience.

0101	Chantel Rodriguez MW 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

HIST328L **Selected Topics in History; Empires, Revolutions, and Cold Wars: Modern Central and Eastern Europe**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

0101	Piotr H Kosicki TuTh 12:30pm - 1:45pm	Seats (Total: 40) ONLINE

HIST328R **Selected Topics in History; Global History of Soccer: Politics, Culture, and Society**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The course focuses on the transnational history of soccer as shaping political culture and national identities around the world from the late 19th century to the present. The course covers historical significance of the game in Europe, Latin America, the United States, Africa, and Asia.

0101	Daniel Richter MW 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

HIST329B **Special Topics in History; Drugs in the Modern World: From Opium Wars to the War on Drugs**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

This course explores the history of drugs in a global context by focusing on the origins and demand for drugs including opium, alcohol, caffeine, cocaine, marijuana, heroin, OxyContin, and Viagra.

0101	Daniel Richter MW 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 40) ONLINE ONLINE

HIST329E **Special Topics in History; Black Women in United States History**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Cross-listed with WMST314 and HIST329E. Credit granted for AASP313, HIST329E, or WMST314. Black American women's history from slavery to the present. Focused on gaining a fuller understanding of the effect of race, class and gender on the life cycles and multiple roles of Black women as mothers, daughters, wives, workers and social-change agents.

0101	Elsa Barkley Brown TuTh 3:30pm - 4:45pm	Seats (Total: 40) ONLINE

HIST329G **The Israeli Settler Movement: The Road to One State?**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHS

Cross-listed with: ISRL329G, JWST319N. Credit only granted for: HIST329G, ISRL329G or JWST319N.

An exploration of the Israeli settler movement in the West Bank and its rise to prominence in Israeli politics in the last two decades. We will also examine how the success of the settlers influences the prospects of a two-state solution for the Israeli-Palestinian conflict, as well as the merit of claims that Israel-Palestine is already under a "one-state" reality.

0101	Shay Hazkani TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE

HIST329X **Special Topics in History; Mobility in History: Planes, Trains, and Automobiles**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A social and cultural history of various means of transportation in the 19th and 20th century in Europe and the United States, with a focus on the tension between individual forms of transportation (walking, cars) and collective means (trains, airplanes).

0101	Thomas Zeller M 2:00pm - 3:15pm W 2:00pm - 3:15pm	Seats (Total: 19) ESJ 1309 ONLINE

HIST331 **Europe in the High Middle Ages: 1000-1500**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Cross-listed with RELS341. Credit only granted for: HIST331 or RELS341.

Medieval civilization in the 11th through 15th centuries. Emphasis on cultural and political developments of the high Middle Ages with study of the principal sources of medieval thought and learning, art and architecture, and political theory prior to the Renaissance.

0101	Janna Bianchini	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

HIST333 **The European Reformations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST111; or permission of instructor. Cross-listed with R ELS343. Credit only granted for: HIST333 or RELS343.

Examination of developments in European religion between 1450 and 1700; the late-medieval Church and its critics; rise of Protestant thought in Germany and its spread throughout Europe; reform efforts in the Catholic Church; religious wars and violence and their impact on state and society; consequences of religious reform in society and its impact on the family and women.

0101	Stefano Villani	Seats (Total: 30)
	TuTh 9:30am - 10:45am	CSI 1115

HIST339A **Special Topics in History; History of Socialism**

Credits: 3 Grading Method: Regular

Thematic exploration of a topic in history.

A global historical approach to one of the most enduring challenges to capitalism, with attention to the political movements it has animated and its social, aesthetic, and intellectual trajectories.

0101	David Sartorius	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	ONLINE

HIST353 **America in the Revolutionary Era, 1763-1815**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The background and course of the American Revolution and early nationhood through the War of 1812. Emphasis on how the Revolution shaped American political and social development, the creation of a new government under the Constitution, and the challenges facing the new nation.

0101	Holly Brewer	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	ONLINE

HIST355 **Civil War and the Rise of Industrialization, 1860-1900**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST200, HIST201, HIST210, HIST213, HIST222, HIST254, HIST255, or HIST275; or must have completed HIST156 or HIST157; or permission of instructor. Credit only granted for: HIST355 or HIST364.

Civil War, sectional and class conflicts and their impact on American life and institutions from the beginning of the Civil War through the Gilded Age; social, economic, and political reconstruction of the Union; industrialization, urbanization, and technological changes.

0101	Robert Chiles	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ONLINE

HIST357 **Recent America: 1945-Present**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST201, HIST211, HIST213, HIST222, HIST255, or HIST275; or must have completed HIST157; or permission of instructor.

American history from the inauguration of Harry S. Truman to the present with emphasis upon politics and foreign relations, but with consideration of special topics such as radicalism, conservatism, and labor.

0101	Howard Smead	Seats (Total: 40)
	MW 2:00pm - 3:15pm	ONLINE

HIST361 **Metropolitan Change and Modern America: Cities, Suburbs, Hinterlands**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST201, HIST211, HIST222, or HIST255; or must have completed HIST157; or permission of instructor. Credit only granted for: HIST419B or HIST361. Formerly: HIST419B.

An exploration of the forces that have transformed metropolitan and rural life since the mid-19th century. What role have politics, policy, economics, and ideology/culture played in creating an urbanized and then a "suburbanized" nation?

0101	David Freund	Seats (Total: 40)
	MW 2:00pm - 3:15pm	ONLINE

HIST369F **Special Topics in Study Abroad III; Caesar, Cicero and the Collapse of the Roman Republic**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HIST370 **Jews and Judaism in Antiquity I: Sixth Century BCE through the First Century CE**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSSP, DVUP

Cross-listed with JWST325. Credit only granted for: HIST370 or JWST325.

Political, social, and religious history of the Jews from the Persian period to the Judean revolt of 66-70 CE. Special attention to the rise of sectarian and revolutionary movements.

0101	Hayim Lapin MW 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

HIST375 **Modern Jewish History II: World Jewry Since 1870**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Cross-listed with JWST344. Credit only granted for: HIST375 or JWST344.

Social, political, economic, and cultural change in the Jewish world since 1870. Emphasis on emancipation, assimilation, and new forms of Jewish identity in Western and Eastern European Jewry from the 19th Century to the present.

0101	Marsha Rozenblit TuTh 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

HIST382 **Law and Culture in Late Imperial China**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

An exploration of Chinese law and its social/cultural implications in the late imperial period (1550s-1900s). Major interpretations of the conceptions of law and justice, the functioning of the judicial system, and local courts. An introduction to society and culture, politics and the bureaucracy, family and gender relations, and literature and popular religion of China through the lens of law.

0101	Ting Zhang MW 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

HIST386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-History department; and junior standing or higher.

The History Department's Internship program. Pre-professional experience in historical research, analysis, and writing in a variety of work settings.

Contact department for information to register for this course.

HIST395 **Honors Colloquium I**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-History department; and must be in History program.

History and theory: the conceptual underpinnings of the historical discipline. Students evaluate several contrasting theories of history. Prerequisite for other honors courses.

0101	Robyn Muncy	Seats (Total: 15)	
	W 1:00pm - 2:50pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

HIST398 **Honors Thesis I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Individual research and preparation of History Honors Theses.

Contact department for information to register for this course.

HIST399 **Honors Thesis II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Individualized research and preparation of History Honors Theses.

Contact department for information to register for this course.

HIST405 **Environmental History**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An introduction to the key issues and methods of environmental history. The scope of the subject is discussed, as well as its relationship with other disciplines, such as ecology, anthropology, and geography. A primary focus is environmental change in history with emphasis on the American experience.

0101	Thomas Zeller W 3:30pm - 6:00pm	Seats (Total: 20) ONLINE	

HIST408B **Senior Seminar; What Does Government Do? The State in American History**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

Permission of Department Required.

0101	David Freund W 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 12) ONLINE ONLINE	 Discussion

HIST408E **Senior Seminar; Empire and Central Asia**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

Examines the role of empire in the making of modern Central Asia, focusing on Afghanistan, Xinjiang (Western China) and five former Soviet republics.

0101	Sarah Cameron M 11:00am - 12:50pm Contact instructor or department for details.	Seats (Total: 12) MMH 1304

HIST408W **Senior Seminar; The Struggle for US Women's Suffrage: History and Memory**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

0101	Robyn Muncy	Seats (Total: 12)	
	Th 2:00pm - 3:50pm Class time/details on ELMs	ONLINE ONLINE	Discussion

HIST408Z **Senior Seminar; The Cuban Revolution**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

Looking beyond familiar Cold War narratives about Fidel Castro and U.S. foreign relations, this readings seminar explores recent scholarship about the Cuban Revolution that seeks to understand its cultural, popular, and transnational dimensions.

0101	David Sartorius	Seats (Total: 12)	
	Tu 2:00pm - 3:50pm Class time/details on ELMs	ONLINE ONLINE	Discussion

HIST415 **Ideas and Politics in Europe Since 1900**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examination of intersection of ideas and politics in Europe since 1900. Focus will be on advocates of liberalism, social democracy, fascism, Nazism, communism, and conservatism and their impact on politics and policy since 1900.

0101	Jeffrey Herf	Seats (Total: 15)	
	Th 2:00pm - 4:30pm	ONLINE	

HIST419Q **Before the Holocaust: The Golden Age of Eastern European Jewry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP

Cross-listed with: JWST370. Credit only granted for: JWST419E, JWST370, or HIST419Q. Formerly: JWST419E.

An exploration of the history of the Jews of Eastern Europe from the period of the Polish Lithuanian Commonwealth until the Holocaust. Topics to be covered include religious, political, social, and cultural transformation of Jewish life in Eastern Europe in the context of the general political changes in the area.

Jointly offered with JWST370. Credit granted for HIST419Q or JWST370. An exploration of the history of the Jews of Eastern Europe from the period of the Polish Lithuanian Commonwealth until the Holocaust. Topics to be covered include religious, political, social, and cultural transformation of Jewish life in Eastern Europe in the context of the general political changes in the area.

0101	Rachel Manekin	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

HIST428A **Selected Topics in History; Chinese Cities and Frontiers**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

This course explores the complex and multifaceted aspects of Chinese cities, discussing issues such as how each city recreated Chinese cultural tradition and spatial order, how it dealt with ethnic conflicts and demographic integration, and how urbanization empowered or victimized Chinese women during different historical periods.

0101	James Gao	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	ONLINE

HIST428J **Selected Topics in History; Global Revolutions in the Modern Era**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

What are the key social, cultural, political, and economic causes of revolution? How and why have modern revolutions migrated across borders, continents, and oceans? This seminar -- intended for both advanced undergrads and graduate students -- considers the American, French, and Russian Revolutions as global events before exploring the rise and fall of Communist regimes in the Soviet Union and in Eastern Europe, the failed Tiananmen Square revolution in China, the rise of the mujahideen in Afghanistan and the end of apartheid in South Africa. The seminar closes with challenges facing the global order in the 21st century, including ongoing struggles in the Middle East, North Africa, and Eastern Europe.

0101	Piotr H Kosicki	Seats (Total: 9)
	Tu 3:30pm - 6:00pm	ONLINE

HIST428N **Selected Topics in History; Living with Pachamama: Religion and Ritual in the Andes from the Incas to the Present**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Cross-listed with AMST428N, LASC448N, and RELS429N. Credit granted for HIST428N, AMST428N, LASC448N, or RELS429N.

0101	James Maffie	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ONLINE

HIST429A **Special Topics in History; Victoria's Secrets: Sex and Class in Nineteenth Century Britain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Queen Victoria, Darwin, Sherlock Holmes and Jack the Ripper: meet some of the Victorians who continue to captivate our historical imagination and learn the truth about sex, class, and race in 19th Century Britain.

0101	Julie Taddeo	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

HIST429O **Special Topics in History; Righting Historical Wrongs: Global Struggles for Truth and Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Explores the diverse range of approaches that societies around the world have adopted to investigate, adjudicate, acknowledge, or otherwise atone for mass violence and gross human rights abuses.

0101	Erin Mosely	Seats (Total: 12)
	W 3:30pm - 6:00pm	ONLINE

HIST429X **Tradition and Change: Jewish Religion in the Modern World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DSHU, DVUP

Cross-listed with: JWST347, RELS419R. Credit only granted for: JWST347, HIST429X, or RELS419R.

An exploration of the history of the different modern Jewish religious movements that developed in Europe, starting with messianic movements and ending with Reform and Orthodoxy. Emphasis will be placed on the influence of the academic study of Judaism on the development of modern Jewish religious ideologies and practices.

Cross-listed with JWST347 and RELS419R. Credit granted for JWST347, HIST429X, or RELS419R. An exploration of the history of the different modern Jewish religious movements that developed in Europe, starting with messianic movements and ending with Reform and Orthodoxy. Emphasis will be placed on the influence of the academic study of Judaism on the development of modern Jewish religious ideologies and practices.

0101	Rachel Manekin	Seats (Total: 40)
	MW 4:00pm - 5:15pm	ONLINE

HIST450 **American Capitalism: 1600-1900**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST200, HIST210, HIST213, HIST222, HIST254, HIST275, or HIST311; or permission of instructor.

This course explores the transformation of economic life in what became the United States from pre-colonial times to 1900, with special emphasis on economic interactions among Native American, Mexican, and European societies; how and why capitalism took root and became dominant; economic dimensions of the Revolutionary and Civil Wars; why the North, South, and West followed distinct economic paths; the revolutions in transportation and communications; slavery as a business system; causes and consequences of industrialization; and trends in the distribution of wealth and income.

0101	David Sicilia	Seats (Total: 40)
	MW 2:00pm - 3:15pm	ONLINE

HIST454 **Constitutional History of the United States: From Colonial Origins to 1865**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The interaction of government, law, and politics in the constitutional system. The nature and purpose of constitutions and constitutionalism; the relationship between the constitution and social forces and influences, the way in which constitutional principles, rules, ideas, and institutions affect events and are in turn affected by events. The origins of American politics and constitutionalism through the Constitutional Convention of 1787. Major constitutional problems such as the origins of judicial review, democratization of government, slavery in the territories, secession, and civil war.

0101	Michael Ross	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	ASY 2203

HIST466 **Immigration and Ethnicity in the U.S.**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AAST200, AAST201, AAST222, HIST200, HIST201, HIST221, or HIST222; or must have completed HIST156 or HIST157; or permission of ARHU-History department. Credit only granted for: AAST498L or HIST466.

Seminar exploring historical problems relating to US immigration, race, and ethnicity since 1848, with emphasis on cultural impacts of migration on immigrants, their children, and U.S. society.

0101	Robert Chiles	Seats (Total: 20)
	Th 2:00pm - 4:30pm	ONLINE

HIST481 **A History of Modern China**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Modern China from 1644 to the People's Republic of China. Emphasis on the coming of the West to China and the various stages of the Chinese reaction.

0101	James Gao	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	ONLINE

HIST482 **History of Japan to 1800**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Traditional Japanese civilization from the age of Shinto mythology and introduction of continental learning down to the rule of military families, the transition to a money economy, and the creation of a townsmen's culture. A survey of political, economic, religious, and cultural history.

0101	Louisa Rubinfien	Seats (Total: 30)
	MW 3:30pm - 4:45pm	ONLINE

HIST491 **History of the Ottoman Empire**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Survey of the Ottoman Turkish Empire from 1300 A.D. to its collapse during World War I. Emphasis on the empire's social and political institutions and its expansion into Europe, the Arab East and North Africa.

0101	Madeline Zilfi	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

HIST499 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST601 **History and Contemporary Theory**

Credits: 3 Grading Method: Regular, Audit

An introduction to contemporary theories in philosophy, literary criticism, cultural studies, anthropology, and other fields; and analysis of their usefulness to historians.

0101	Saverio Giovacchini Tu 6:00pm - 8:30pm	Seats (Total: 15) ONLINE

HIST607 **The Teaching of History in Institutions of Higher Learning**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

0101	Alejandro Caneque Contact instructor or department for details.	Seats (Total: 15)
0201	Antoine Borrut Contact instructor or department for details.	Seats (Total: 6)

HIST608A **General Seminar; American History**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

General seminar in student's major field of study (e.g., U.S.; Women and Gender; International, World, and Comparative; Science and Technology; Latin America) exploring the concentration's major issues, topics, and literature.

Prerequisite: permission of department.

0101	Holly Brewer Tu 3:30pm - 6:00pm	Seats (Total: 15) ONLINE

HIST610 **Introduction to Museum Scholarship**

Credits: 3 Grading Method: Regular, Audit

Cross-listed with ANTH655, AMST655. Credit only granted for: AMST655, ANTH655, or HIST610.

Provides students a basic understanding of museums as cultural and intellectual institutions. Topics include the historical development of museums, museums as resources for scholarly study, and the museum exhibition as medium for presentation of scholarship.

For Fall 2008: Additionally cross-listed with INST728T. Credit only granted for ANTH655, AMST655, HIST610, or INST728T.

0101	Diana Marsh	Seats (Total: 20)
	Th 2:00pm - 4:45pm	ONLINE

HIST619A **Special Topics in History; Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST619B **Special Topics in History; Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST619F **Special Topics in History; Historical Research**

Credits: 1-3 Grading Method: Regular, Audit, Sat-Fail

0101	Philip Soergel	Seats (Total: 10)
	Th 3:30pm - 6:00pm	SKN 0104

HIST619G **Special Topics in History; Slavery, Freedom, and Citizenship: Readings in Nineteenth Century US**

Credits: 3 Grading Method: Regular, Audit

0101	Christopher Bonner	Seats (Total: 12)
	Th 3:30pm - 6:00pm	ONLINE

HIST619O **Special Topics in History; Righting Historical Wrongs: Global Struggles fro Truth and Justice**

Credits: 3 Grading Method: Regular, Audit

Explores the diverse range of approaches that societies around the world have adopted to investigate, adjudicate, acknowledge, or otherwise atone for mass violence and gross human rights abuses.

0101	Erin Mosely W 3:30pm - 6:00pm	Seats (Total: 8) ONLINE

HIST619Y **Special Topics in History; History of the Ottoman Empire**

Credits: 3 Grading Method: Regular, Audit

0101	Madeline Zilfi TuTh 9:30am - 10:45am	Seats (Total: 5) ONLINE

HIST638C **Special Topics in History; War and Society in 20th Century US History**

Credits: 3 Grading Method: Regular, Audit

Special Topics in History.

0101	Patrick Chung Th 6:00pm - 8:30pm	Seats (Total: 12) ONLINE

HIST638J **Special Topics in History; Global Revolutions in the Modern Era**

Credits: 3 Grading Method: Regular, Audit

Special Topics in History.

What are the key social, cultural, political, and economic causes of revolution? How and why have modern revolutions migrated across borders, continents, and oceans? This seminar -- intended for both advanced undergrads and graduate students -- considers the American, French, and Russian Revolutions as global events before exploring the rise and fall of Communist regimes in the Soviet Union and in Eastern Europe, the failed Tiananmen Square revolution in China, the rise of the mujahideen in Afghanistan and the end of apartheid in South Africa. The seminar closes with challenges facing the global order in the 21st century, including ongoing struggles in the Middle East, North Africa, and Eastern Europe.

0101	Piotr H Kosicki Tu 3:30pm - 6:00pm	Seats (Total: 9) ONLINE

HIST639X **Special Topics in History; Comparative American Borderlands**

Credits: 3 Grading Method: Regular, Audit

Special Topics in History.

0101	Chantel Rodriguez	Seats (Total: 12)
	W 3:30pm - 6:00pm	ONLINE

HIST708 **Directed Independent Reading for Comprehensive Examinations I**

Credits: 1-4 Grading Method: Sat-Fail

Directed reading in preparation for Doctoral Comprehensive Examinations. In consultation with their advisors, students will select a number of books and articles from an approved list. Grading for the course will reflect performance on the written and oral sections of the Comprehensive Examinations.

Contact department for information to register for this course.

HIST709 **Directed Independent Reading for Comprehensive Examinations II**

Credits: 1-4 Grading Method: Sat-Fail

Directed reading in preparation for Doctoral Comprehensive Examinations. In consultation with their advisors, students will select a number of books and articles from an approved list. Grading for the course will reflect performance on the written and oral sections of the Comprehensive Examinations.

Contact department for information to register for this course.

HIST799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

HIST811 **Museum Scholarship Practicum**

(Perm req)

Credits: 3-6 Grading Method: Regular

Prerequisite: AMST856, ANTH856, or HIST810. Restriction: Permission of Museum Scholarship Program required. Cross-listed with ANTH857, AMST857. Credit only granted for: AMST857, ANTH857, or HIST811.

Students devise and carry out a research program using the collections at the Smithsonian Institution or some other cooperating museum, working under joint supervision of a museum professional and a university faculty member.

0401	Mary Sies	Seats (Total: 4)
	Contact instructor or department for details.	

0901	Instructor: TBA	Seats (Total: 2)
	Contact instructor or department for details.	

HIST819A **Special Topics in History: Independent Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Individual graduate research in an area not covered by current seminar offerings. The product will be a finished research paper normally based on original materials.

Department permission required.

Contact department for information to register for this course.

HIST819B **Special Topics in History: Independent Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Individual graduate research in an area not covered by current seminar offerings. The product will be a finished research paper normally based on original materials.

Department permission required.

Contact department for information to register for this course.

HIST819F **Special Topics in History: Independent Research; Advanced Historical Research and Writing**

Credits: 1-3 Grading Method: Regular, Audit, Sat-Fail

Individual graduate research in an area not covered by current seminar offerings. The product will be a finished research paper normally based on original materials.

0101	Alejandro Caneque	Seats (Total: 10)
	Th 6:00pm - 8:30pm	TWS 0320

HIST819M **Special Topics in History: Independent Research; United States History: Reconstruction to the Present**

Credits: 3 Grading Method: Regular, Audit

Individual graduate research in an area not covered by current seminar offerings. The product will be a finished research paper normally based on original materials.

0101	Julie Greene	Seats (Total: 12)
	W 6:00pm - 8:30pm	ONLINE

HIST898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

HIST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

HLSA Health Services Administration Fall 2020

HLSA300 **Introduction to Health Policy and Services**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in SPHL100 or PHSC300. Restriction: Must be in Public Health Science program; and must have earned a minimum of 60 credits. Credit only granted for: SPHL498P or HLSA300. Formerly: SPHL498P.

A multidimensional view of public health policy and services. Through interactive discussion of assigned readings, team-based learning, and supplementary lecture, students will learn about the nature of and development of policy, public health policy, and financing and delivery of health care services. This course will place a significant emphasis on a team-based learning approach to understanding the health care system and health care reform.

0101	Neil Sehgal	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	W 11:00am - 11:50am	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0102	Neil Sehgal	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	W 12:00pm - 12:50pm	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0103	Neil Sehgal	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	W 2:00pm - 2:50pm	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		

0104	Neil Sehgal	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	W 3:00pm - 3:50pm	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0106	Neil Sehgal	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0107	Neil Sehgal	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	F 11:00am - 11:50am	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
0108	Neil Sehgal	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	F 12:00pm - 12:50pm	ONLINE	Discussion
	Restricted to College Park students in the Public Health Science major.		
ESG1	Negin Fouladi	Seats (Total: 35)	
	M 2:00pm - 4:30pm	ONLINE	
	Restricted to Shady Grove students in the Public Health Science major.		

HLSA465 **Creating Headspace: Designing Solutions to Address Mental Health and Wellness for UMD Students**

Credits: 3 Grading Method: Regular

Prerequisite: EPIB315 and HLTH366.

Students will use Design Thinking to create, reshape, redesign and transform the ways in which mental health and wellness is perceived and addressed on the campus. This course will incorporate students and the UMD community as stakeholders in designing, planning and contributing to developing solutions that leverage existing mental health resources or create new pathways to improve mental health and wellness at UMD. Students will learn and use design thinking skills to enhance public health practice skills in project proposals and grant writing.

0101	Portia Buchongo	Seats (Total: 20)	
	Tu 1:00pm - 3:30pm	ONLINE	

HLSA484 **Redesigning Health Care: Developing a Clinic to Meet Community Needs**

Credits: 3 Grading Method: Regular

Restriction: Must have completed a minimum of 60 credits. Additional information: Two sessions will be on-site at the Mona Clinic in Temple Hills, MD, and the remaining sessions will be taught in the University of Maryland's Academy for Innovation and Entrepreneurship.

Provides an opportunity for students to learn a key entrepreneurial skill, Design Thinking, while helping to build, reshape, redesign and transform delivery of health care in the Mona Center, a new community center and clinic in Prince George's County. This new, modern vision for a health and wellness clinic embraces student involvement in designing, planning and contributing to innovative programs, solutions, and processes to improve the clinic's ability to meet community and patient needs by addressing the social determinants of health as well as traditional clinical health status. Students in the class will develop empathy for patients, providers and other stakeholders, define problems, select a specific problem for intervention, understand problems based on stakeholder input, ideate, reframe and suggest options to solve or address the problem, prototype solutions, test ideas, and make recommendations to inform implementation and ongoing measurement and monitoring of impact.

0101	Stephen Thomas F 10:00am - 12:30pm Class time/details on ELMs	Seats (Total: 24) ESJ 0215 ONLINE

HLSA601 Introduction to Health Systems

Credits: 3 Grading Method: Regular, Audit

Management and leadership skills for effective public health planning, organization, management and administration. Emphasis is on the role of institutions in learning and behavioral change process, organizational theory, administration management, and coordinating provision of community health services.

0102	Gilda Martinez Tu 4:00pm - 6:45pm	Seats (Total: 60) ONLINE
PLH1	Negin Fouladi Class time/details on ELMs *Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 20) ONLINE
PLP1	Negin Fouladi Class time/details on ELMs *Must be in online Health Administration program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 15) ONLINE

HLSA611 **Introduction to Health Equity**

Credits: 3 Grading Method: Regular

The emerging field of health equity is concerned with understanding the causes and consequences of social disparities in population health. This course is designed to expose students to the foundational issues in health equity from a variety of perspectives. Through weekly meetings and discussion, students will develop familiarity with the major literature in the field of health equity. The course is divided into three sections: (1) Understanding & Addressing Health Disparities; (2) Disparity Populations; and (3) Solutions in Health Equity. Students will gain understanding of the dimensions and sources of health inequality, including race/ethnicity, socioeconomic status, gender, nativity, and sexual minority status. Current policy debates and recent policy developments related to health equity are also briefly discussed.

0101	Kellee White	Seats (Total: 25)
	Th 4:00pm - 6:45pm	ONLINE

HLSA688 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master or doctoral students who desire to pursue special research problems under the direction of a faculty memeber of the department may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

HLSA702 **Policy and Politics of Health**

Credits: 3 Grading Method: Regular, Audit

Organizational and financial components of the U.S. health care system, including social and political forces that bind the system. Advanced political analysis of the health care system, including key issues and problems.

Although this is an online course, we will have one required in-person visit to Annapolis, Maryland to visit the state legislature organized by the instructor. In addition, there are three online synchronous Q&A sessions that students should participate in remotely and will be arranged by the instructor.

0101	Lori Simon-Rusinowitz	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

HLSA709 **Graduate Seminar**

Credits: 1 Grading Method: Sat-Fail, Audit

The purpose of the course is for doctoral students to present their work on their dissertation to fellow doctoral students and faculty in an informal supportive environment. Faculty and students provide feedback and suggestions that are helpful to the presenting students.

0101	Luisa Franzini	Seats (Total: 10)
	Th 12:00pm - 12:50pm	ONLINE

HLSA711 **Health Economics and Analysis**

Credits: 3 Grading Method: Regular, Audit

Provides an analysis of health and health care services as economic goods. Using microeconomic theories, we will examine the behavior of health care providers, consumers, markets, and firms.

0101	Jie Chen	Seats (Total: 20)
	Tu 4:00pm - 6:45pm	ONLINE

HLSA720 **Health Law and Ethics**

Credits: 3 Grading Method: Regular, Audit

The legal system helps determine the relationships prevailing among individuals, institutions and governments by setting out the rights, duties and powers of the various parties. This course will look at some of the more important concepts the law uses within the context of health services and public health.

0101	William Tilburg	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

HLSA724 **Developing and Implementing Health Policy in Maryland**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in HLSA601.

Provides students with a thorough overview of Marylands health care policymaking process, including critical analysis of legislative, regulatory, financing, and delivery factors that shape health care policy. Examination of major current and ongoing health care policy issues in the state of Maryland. Students will be given the opportunity to receive briefings from key stakeholders who will offer their insights into complex and controversial health care policy issues in Maryland.

0101	Mark Luckner	Seats (Total: 20)
	W 7:00pm - 9:45pm	ONLINE

HLSA725 **Econometrics in Public Health**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SPHL602; or students who have taken courses with comparable content may contact the department. Additional information: priority enrollment will be given to students at the School of Public Health.

Empirical course to introduce students to econometric methods and their applications in public health.

0101	Luisa Franzini	Seats (Total: 20)
	Th 4:00pm - 6:45pm	ONLINE

HLSA727 **Causal Inference in Health Services Research**

Credits: 3 Grading Method: Regular

Prerequisite: HLSA725 or permission of instructor.

An overview of the conceptual and empirical tools used to infer causation in health and health care research. Advantages and limitations of experimental and quasi-experimental designs in health services research are discussed and students gain experience through applied exercises.

0101	Michel Boudreaux	Seats (Total: 20)
	W 4:00pm - 6:45pm	ONLINE

HLSA745 **Public Health Practice and Management**

Credits: 3 Grading Method: Regular, Audit

Examines the relationship of practice and management in performing essential public health services on local, state and national levels.

PLH1	Joseph Flannery	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.	

HLSA750 **Healthcare Management Information Systems**

Credits: 3 Grading Method: Regular, Audit

Provides a background and overview of the analysis, design, evaluation, selection, installation, use, and mangement of information systems in health care settings. Students will review the information management function and value of information and the role of information technology in the provision of high quality care and management decision making. Details on computer hardware, software, networking, and telecommunications sufficient for understanding of concepts relevant to health care managers and staff will be addressed.

0501	Melvin Seale	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

HLSA765 **Dissertation Proposal Development Seminar**

Credits: 3 Grading Method: Regular

Recommended: Completed all coursework related to one s dissertation topic; and identified in collaboration with one s dissertation advisor a topic area and potential data set. Restriction: Must be in Health Services Ph.D. (Doctoral) program; or permission of instructor. And must have passed departmental qualifying exam.

Designed to support doctoral students prepare their dissertation proposal and oral presentation. The course is structured around a literature synthesis and development of a modified AHRQ R36 grant application which includes developing a research question and hypotheses, a conceptual model, specific aims, background and significance, and research strategy. The importance of communicating complex ideas through oral and written forms will be emphasized.

0101	Dylan Roby	Seats (Total: 15)
	Th 4:00pm - 6:45pm	ONLINE

HLSA770 **Continuous Quality Improvement in Healthcare**

Credits: 3 Grading Method: Regular, Audit

Designed for the health care professional or administrator involved in quality assurance in health care. Course includes historical beginnings, state-of-the-art, voluntary, governmental efforts, and tools to promote quality assurance.

0101	Robert Mekelburg	Seats (Total: 20)
	Tu 7:00pm - 9:45pm	ONLINE
PLP1	Aitalohi Amaize	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
	Must be in online Health Administration program. For permission to enroll, contact oes@umd.edu.	

HLSA772 **Healthcare Leadership and Communications**

Credits: 3 Grading Method: Regular, Audit

Health care administrators rely on transformational leadership skills and insights to help their organizations rise to the social financial, public health, and technological challenges of the future. Students will assess and develop their leadership strengths, apply key leadership communication principles, and critically analyze relevent leadership models, exploring their utility in addressing key leadership issues in health care organizations. An underlying theme will be the identification of core values involved in health care delivery, integration of those values in personal and organizational missions, and effective communication to stakeholders.

PLH1	Tracey Manning	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.	
PLP1	Diane Dixon	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	Must be in online Health Administration program. For permission to enroll, contact Dr. Negin Fouladi, program director, at fouladi@umd.edu.	

HLSA775 **Public Health Research**

Credits: 3 Grading Method: Regular

Prerequisite: EPIB650. Restriction: Must be in a major in SPHL-School of Public Health; or permission of instructor.

Provides an interdisciplinary approach to gaining an understanding of and acquiring the skills to conduct public health research. This course covers policy and social issues, theory, and methods of evaluation and participatory research, from simple community based health programs to large-scale interventions. The course emphasizes experimental and quasi-experimental designs to estimate program impact as well as evaluation of program implementation. Case studies drawn from the public health field illustrate various types of evaluations and participatory research initiatives. Lectures, interactive discussions, group projects, individual projects and related assignments.

0101	Dahai Yue	Seats (Total: 20)
	Th 4:00pm - 6:40pm	ONLINE

HLSA778 **Internship in Public Health**

Credits: 1-4 Grading Method: Regular, Audit

Internship providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

Contact department for information to register for this course.

HLSA780 **Qualitative Methods for Health Services Research**

Credits: 3 Grading Method: Regular, Audit

Qualitative research is a multi-methods approach to the study of social interactions in natural settings. Through triangulation of methods, the researcher attempts to make sense of, or interpret, phenomema in terms of the meanings people bring to them.

0101	Lori Simon-Rusinowitz	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

HLSA785 **Internship in Public Health**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of SPHL-Health Services Administration department. Credit only granted for: HLSA785 or HLSA778.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

PLH1	Negin Fouladi	Seats (Total: 20)
	Contact instructor or department for details.	
	Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.	

HLSA786 **Capstone Project in Public Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of SPHL-Health Services Administration department.

Capstone experience provding opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Contact department for information to register for this course.

HLSA790 **Advanced Methods in Health Services Research**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SPHL602; or permission of instructor.

Provides an in-depth examination of health services research literature with emphasis on methodological scrutiny and application of methods beyond linear regression such as categorical regression, survival analysis, selection issues, and endogeniety.

0101	Kellee White	Seats (Total: 25)
	W 4:00pm - 6:45pm	ONLINE

HLSA798 **HLSA Journal Club**

Credits: 1 Grading Method: Sat-Fail, Audit

The course will highlight current topics in health services research. Outside speakers will present their research in a few of the classes. For the other classes, graduate students in the HLSA programs will select important and timely articles that they will present to the class for discussion in an informal setting.

0101	Jie Chen	Seats (Total: 10)
	Th 12:00pm - 12:50pm	ONLINE

HLSA799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

HLSA898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

HLSA899 **Doctoral Dissertation Research**

(Perm req)

Credits: 1-8 Grading Method: Sat-Fail

Contact department for information to register for this course.

HLSC100 **Students in the University: Integrated Life Sciences**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Honors College Integrated Life Sciences program. Credit only granted for: EDCP108O, HLSC100, HONR100, or UNIV100H.

In a small classroom setting, Integrated Life Sciences students learn about academic resources on and off campus.

0101	Zabrina Anzyl Tu 2:00pm - 3:15pm *For students in the Honors College Integrated Life Sciences Program only.*	Seats (Total: 25) ONLINE
0102	Zabrina Anzyl W 2:00pm - 3:15pm *For students in the Honors College Integrated Life Sciences Program only.*	Seats (Total: 25) ONLINE
0103	Zabrina Anzyl Th 2:00pm - 3:15pm	Seats (Total: 25) ONLINE
0104	Zabrina Anzyl F 2:00pm - 3:15pm	Seats (Total: 25) ONLINE

HLSC207 **Principles of Biology III Organismal Biology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: (BSCI160 and BSCI161; or BSCI106); and (BSCI170 and BSCI171; or BSCI105). Or students who have taken courses with comparable content may contact the department. Restriction: Must be in the Honors College Integrated Life Sciences program. Credit only granted for: BSCI207, BSCI279D, or HLSC207.

The diversity, structure and function of organisms as understood from the perspective of their common physicochemical principles and unique evolutionary histories.

0101	Bretton Kent MWF 9:00am - 9:50am	Seats (Total: 96) ONLINE

HLTH Health Fall 2020

HLTH124 **Introduction to Behavioral and Community Health**

Credits: 1

Grading Method: Regular, Audit

Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

Required of first semester Community Health majors to expose them to introductory-level concepts within the field of behavioral and community health as well as the Community Health degree program. Includes discussion on the delivery of behavioral and community health at the local, state, national, and global levels; career opportunities in the diverse sectors of the community health field; undergraduate programmatic information; and strategies for student success.

In-person meeting dates are TBD. See course Canvas/ELMS site for details .

0101	M Reynolds	Seats (Total: 80)
	M 1:00pm - 1:50pm	ONLINE
	Class time/details on ELMs	ONLINE

HLTH140 **Personal and Community Health**

Credits: 3

Grading Method: Regular, Audit

Meaning and significance of physical, mental and social health as related to the individual and to society; important phases of national health problems; constructive methods of promoting health of the individual and the community.

Cross-listed with HLTH140H. Credit granted for HLTH140 or HLTH140H.

0101	James Butler	Seats (Total: 200)
	TuTh 9:30am - 10:45am	ONLINE

HLTH140H **Personal and Community Health**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Meaning and significance of physical, mental and social health as related to the individual and to society; important phases of national health problems; constructive methods of promoting health of the individual and the community.

Cross-listed with HLTH140. Credit granted for HLTH140 or HLTH140H.

0101	James Butler	Seats (Total: 200)
	TuTh 9:30am - 10:45am	ONLINE

HLTH170 **The Corporate Footprint: How Industries Influence the Public's Health**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

As public health advocates strive to protect, promote and advance the health of our communities, they sometimes find their efforts in conflict with the activities of corporations and their industry associations. This course will provide an overview of how various industries from Big Pharma to Tobacco Corporations have launched successful campaigns to influence policymakers, counter science and at times mislead the public on the harms of products to the health of communities. Students will also contemplate whether the relationship between corporations and public health advocates can ever be collaborative rather than contentious.

0101	Azieb Kidanu	Seats (Total: 80)
	Class time/details on ELMs	ONLINE

HLTH200 **Introduction to Research in Community Health**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

An overview of specific components and steps involved in the community health research process. Content includes, foundations of research, sampling, measurement design, and analysis in a community context.

0101	Azieb Kidanu	Seats (Total: 120)
	MWF 2:00pm - 2:50pm	ONLINE

HLTH230 **Introduction to Health Behavior**

Credits: 3 | Grading Method: Regular, Audit | CORE: SB | General Education: DSHS

Psychological, social psychological, and sociological approaches to the following health areas: development of health attitudes and behavior, patient-provider interaction and the organization of health care.

Restricted to Majors or non-majors with less than or equal to 45 credits. Students entering Fall 2018 or later: Prerequisite does not apply.

0101	Craig Fryer	Seats (Total: 96)
	TuTh 11:00am - 12:15pm	ONLINE

HLTH234 **Global Health Messages: Understanding Exposure & Impact.**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVCC, SCIS

Using a global perspective, this course teaches students to be critical consumers of current and historical health communication interventions. It also provides students with the skills to develop media interventions that target specific and general populations. Students will discover the array of diverse media messages that influence the health and well-being of individuals and communities.

0101	Dina Borzekowski Tu 3:30pm - 6:15pm	Seats (Total: 40) BRB 1101

HLTH234H **Global Health Messages: Understanding Exposure & Impact.**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVCC, SCIS

Using a global perspective, this course teaches students to be critical consumers of current and historical health communication interventions. It also provides students with the skills to develop media interventions that target specific and general populations. Students will discover the array of diverse media messages that influence the health and well-being of individuals and communities.

0101	Dina Borzekowski Tu 3:30pm - 6:15pm	Seats (Total: 5) BRB 1101

HLTH264 **Tweets & Likes: Digital Health & Social Media**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSHS, SCIS

Examines the current and potential use of digital health and social media to influence public health. Provides an overview of knowledge, skills and terminology necessary to optimize the effectiveness of these technologies to contribute to the enhancement of individual and community health.

Restricted to non-community health majors.

0101	Olivia Kachingwe TuTh 11:00am - 12:15pm	Seats (Total: 40) ONLINE

HLTH264H **Tweets & Likes: Digital Health & Social Media**

(Perm req)

Credits: 3 | Grading Method: Regular, Audit | General Education: DSHS, SCIS

Examines the current and potential use of digital health and social media to influence public health. Provides an overview of knowledge, skills and terminology necessary to optimize the effectiveness of these technologies to contribute to the enhancement of individual and community health.

0101	Olivia Kachingwe	Seats (Total: 5)
	TuTh 11:00am - 12:15pm	ONLINE

HLTH285 **Controlling Stress and Tension**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSHS

Health problems related to stress and tension. Analysis of causative psychosocial stressors and intervening physiological mechanisms. Emphasis on prevention and control of stress through techniques such as biofeedback, meditation and neuromuscular relaxation.

0101	Sharon Desmond	Seats (Total: 60)
	TuTh 8:00am - 9:15am	ONLINE

HLTH285H **Controlling Stress and Tension**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSHS

Health problems related to stress and tension. Analysis of causative psychosocial stressors and intervening physiological mechanisms. Emphasis on prevention and control of stress through techniques such as biofeedback, meditation and neuromuscular relaxation.

0101	Sharon Desmond	Seats (Total: 5)
	TuTh 8:00am - 9:15am	ONLINE

HLTH289 **Topical Investigations**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Independent study by an individual student or an experimental course in special areas of knowledge not covered by regularly scheduled courses.

Contact department for information to register for this course.

HLTH292 **Community Health Engagement**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSSP

Restriction: Must not be in Community Health program.

An exploration and application of basic community health concepts. An integral part of the course is service learning, that includes evaluating, planning and implementing a community health program with a local community partner.

0101	Elizabeth Aparicio TuTh 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

HLTH302 **Measuring Change in Community Based Research**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in HLTH200 and EPIB301. Restriction: Must be in a major within the SPHL-Community Health Department.

Examination of research and evaluation tools that can be applied to community health promotion. Includes the application of qualitative research methods, community needs and strengths assessments, asset mapping, and monitoring and evaluating process, outcome and impact evaluation.

0101	Kirsten Stoebenau TuTh 9:30am - 10:45am	Seats (Total: 45) ONLINE

HLTH302H **Measuring Change in Community Based Research**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in HLTH200 and EPIB301. Restriction: Must be in a major within the SPHL-Community Health Department.

Examination of research and evaluation tools that can be applied to community health promotion. Includes the application of qualitative research methods, community needs and strengths assessments, asset mapping, and monitoring and evaluating process, outcome and impact evaluation.

0101	Kirsten Stoebenau TuTh 9:30am - 10:45am	Seats (Total: 5) ONLINE

HLTH306 **Macro Level Influences on Community Health**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in HLTH124. Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

An examination of the effects and influences of policy decisions at the local, state and national levels on community health delivery. Historical and contemporary policy issues will be included with a focus on how the policies have impacted community organizations and the overall health of communities.

0101	Donna Howard	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	ONLINE

HLTH306H **Macro Level Influences on Community Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in HLTH124. Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

An examination of the effects and influences of policy decisions at the local, state and national levels on community health delivery. Historical and contemporary policy issues will be included with a focus on how the policies have impacted community organizations and the overall health of communities.

0101	Donna Howard, Charlene Kuo	Seats (Total: 5)
	TuTh 12:30pm - 1:45pm	ONLINE

HLTH325 **Poor in America: Health and Wellbeing**

Credits: 3 Grading Method: Regular, Audit General Education: DSHS

Recommended: HLTH130; or HLTH140.

Using the ecological framework, students will explore the complicated relationship between poverty and health and well-being in the United States.

0101	Barbara Curbow	Seats (Total: 29)
	TuTh 3:30pm - 4:45pm	ONLINE

HLTH325H **Poor in America: Health and Wellbeing**

(Perm req)

Credits: 3 Grading Method: Regular, Audit General Education: DSHS

Recommended: HLTH130; or HLTH140.

Using the ecological framework, students will explore the complicated relationship between poverty and health and well-being in the United States.

0101	Barbara Curbow	Seats (Total: 6)
	TuTh 3:30pm - 4:45pm	ONLINE

HLTH364 **Social Media & Digital Tools for Community & Public Health**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Completion of HLTH230 with a C- or higher. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department; Restricted to majors who entered the program in Fall 2018 or later.

Examination of the characteristics and uses of media platforms and digital technologies to expand the capability to identify and reduce community and public health risks at all levels of prevention. Also considered will be the potential threats these new media can play on individual choice, privacy, confidentiality, and social influence -- which themselves can pose health threats to community and public health.

0101	Sandra Saperstein TuTh 2:00pm - 3:15pm *Prerequisite: HLTH230*	Seats (Total: 45) ONLINE

HLTH364H **Social Media & Digital Tools for Community & Public Health**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Completion of HLTH230 with a C- or higher. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department; Restricted to majors who entered the program in Fall 2018 or later.

Examination of the characteristics and uses of media platforms and digital technologies to expand the capability to identify and reduce community and public health risks at all levels of prevention. Also considered will be the potential threats these new media can play on individual choice, privacy, confidentiality, and social influence -- which themselves can pose health threats to community and public health.

0101	Sandra Saperstein TuTh 2:00pm - 3:15pm	Seats (Total: 5) ONLINE

HLTH366 **Behavioral and Community Issues in Public Health**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: HLTH130, HLTH230, PSYC100, SOCY100, SOCY105, or ANTH260. Restriction: Must be in Public Health Science program; or permission of SPHL-Behavioral & Community Health department. And must have earned a minimum of 45 credits. Additional information: This course will initially be restricted to Public Health Science (PHSC) majors, but could ultimately be opened to other majors, particularly those in HLTH.

The exploration of how social and behavioral science theories and public health concepts and methods can be applied to both the health-illness experience and community interventions.

0101	Evelyn King-Marshall MW 2:00pm - 2:50pm Tu 9:30am - 10:20am	Seats (Total: 27) ONLINE ONLINE	 Discussion
0102	Evelyn King-Marshall MW 2:00pm - 2:50pm Tu 12:30pm - 1:20pm	Seats (Total: 27) ONLINE ONLINE	 Discussion
0103	Evelyn King-Marshall MW 2:00pm - 2:50pm W 10:00am - 10:50am	Seats (Total: 27) ONLINE ONLINE	 Discussion
0104	Evelyn King-Marshall MW 2:00pm - 2:50pm W 11:00am - 11:50am	Seats (Total: 27) ONLINE ONLINE	 Discussion
0105	Evelyn King-Marshall MW 2:00pm - 2:50pm W 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0106	Evelyn King-Marshall MW 2:00pm - 2:50pm Th 9:30am - 10:20am	Seats (Total: 24) ONLINE ONLINE	 Discussion

HLTH371 **Communicating Safety and Health**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major within SPHL-Behavioral & Community Health department.

The communication and evaluation of safety and health information. Emphasis on various types of communications and recipient factors which contribute to their success or failure.

Cross-listed with HLTH371H. Credit granted for HLTH371 or HLTH371H.

0101	Devlon Jackson TuTh 2:00pm - 3:15pm *Restriction: Must be a Community Health major.*	Seats (Total: 25) ONLINE

0201	Devlon Jackson TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

Restriction: Must be a Public Health Science major.

HLTH371H **Communicating Safety and Health**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major within SPHL-Behavioral & Community Health department.

The communication and evaluation of safety and health information. Emphasis on various types of communications and recipient factors which contribute to their success or failure.

0101	Devlon Jackson TuTh 2:00pm - 3:15pm	Seats (Total: 25) ONLINE
0201	Devlon Jackson TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

HLTH377 **Human Sexuality**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The biological and developmental aspects of human sexuality; the psychological and emotional aspects of sexual behavior; sexual identity; the historical, cultural, social, linguistic, legal and moral forces affecting sexual issues; the importance of communication, disclosure and intimacy in interpersonal relationships; and research trends in the area of human sexuality.

Cross-listed with HLTH377H. Credit granted for HLTH377 or HLTH377H.

0101	Jenna Messman MW 2:00pm - 3:15pm	Seats (Total: 200) ONLINE

HLTH377H **Human Sexuality**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The biological and developmental aspects of human sexuality; the psychological and emotional aspects of sexual behavior; sexual identity; the historical, cultural, social, linguistic, legal and moral forces affecting sexual issues; the importance of communication, disclosure and intimacy in interpersonal relationships; and research trends in the area of human sexuality.

Cross-listed with HLTH377. Credit granted for HLTH377 or HLTH377H.

0101	Jenna Messman	Seats (Total: 200)
	MW 2:00pm - 3:15pm	ONLINE

HLTH386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of SPHL-Behavioral & Community Health department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

HLTH389 **Topical Investigations**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent study by an individual student or an experimental course in special areas of knowledge not covered by regularly scheduled courses.

Contact department for information to register for this course.

HLTH391 **Making a Difference: Applying Community Health**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: SPHL100, HLTH124, HLTH140, HLTH200, HLTH230, EPIB301, EPIB315, BSCI170, BSCI201, and HLTH302. Students must have completed or be concurrently enrolled in HLTH364. Corequisite: HLTH420 and HLTH490. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

The exploration and application of community health concepts including theoretical models, advocacy, cultural competency, asset mapping, and needs assessment. Includes planning, implementing and evaluating a community health program with a designated community partner.

Both sections (0101, 0201) shared with HLTH391H.

0201	James Butler	Seats (Total: 65)
	TuTh 12:30pm - 1:45pm	ONLINE

HLTH391H **Making a Difference: Applying Community Health**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: SPHL100, HLTH124, HLTH140, HLTH200, HLTH230, EPIB301, EPIB315, BSCI170, BSCI201, and HLTH302. Students must have completed or be concurrently enrolled in HLTH364. Corequisite: HLTH420 and HLTH490. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

The exploration and application of community health concepts including theoretical models, advocacy, cultural competency, asset mapping, and needs assessment. Includes planning, implementing and evaluating a community health program with a designated community partner.

0201	James Butler	Seats (Total: 5)
	TuTh 12:30pm - 1:45pm	ONLINE

HLTH399 **Community Health Field Work**

(Perm req)

Credits: 1-6 Grading Method: Regular

Students will gain practical experience under conditions conducive to educational and professional development. The internship is a supervised period of community/public health activities, carried out in a relevant professional organization, that emphasizes the application of theory and previous coursework.

Contact department for information to register for this course.

HLTH410 **Honors Seminar**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: HLTH200; and must have completed 2 other courses in HLTH. Restriction: Minimum cumulative GPA of 3.5; and must have completed 45 credits before applying.

Undergraduate majors with a strong academic record are provided the opportunity to engage in challenging educational experiences related to the social and behavioral aspects of public health. Students will learn the skills and knowledge to develop, propose, defend, and complete an honors thesis or honors project.

0101	Kerry Green	Seats (Total: 12)
	M 12:00pm - 3:00pm Class time/details on ELMs	Location: TBA ONLINE

HLTH420 **Effective Strategies for Public Health Practice**

(Perm req)

Credits: 3 Grading Method: Regular, Audit General Education: FSOC

Prerequisite: Minimum grade of C- in EPIB301, EPIB315, SPHL100, HLTH124, HLTH140, HLTH200, HLTH230, HLTH302, BSCI170, BSCI171, and BSCI201. Students must have successfully completed or concurrently complete HLTH364. Corequisite: HLTH490 and HLTH391. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

The purpose of this course is to present the interrelationships of curriculum planning, methodology and the selection and use of successful public health presentation strategies. Special problems associated with public health presentations are discussed, and students become familiar with a variety of resources as well as with planning for and implementing demonstration presentations.

0101	M Reynolds TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE
0201	M Reynolds TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE
0301	M Reynolds TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE

HLTH431 **Health Literacy in Action**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: HLTH 371; or equivalent. Repeatable to 0 credit. Credit only granted for: HLTH431 or HLTH498L. Formerly: HLTH498L.

This course introduces the concept of health literacy and develops the knowledge and skills to understand the field and engage productively about health literacy with healthcare providers, systems, and policy makers. The class explores diverse perspectives about health information and communication, and different pathways and strategies to help create the conditions for more informed and engaged individuals and communities.

0101	Catherine Maybury MWF 10:00am - 10:50am *Restricted to students in the Behavioral and Community Health major.*	Seats (Total: 10) ONLINE
0201	Catherine Maybury MWF 10:00am - 10:50am *Restricted to College Park students in the Public Health Science major.*	Seats (Total: 25) ONLINE

HLTH434 **Introduction to Public Health Informatics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in one of the following programs (Community Health; Public Health Science) ; and must have earned a minimum of 60 credits. Credit only granted for: HLTH434 or HLTH498E. Formerly: HLTH498E.

Provides an overview of the field of public health informatics and the influence of technology on the public's health and well-being. Emphasizes the application of various technologies and computer/internet applications to support public health research and practice, including strategies to address new and emerging threats.

0101	Sandra Saperstein W 4:00pm - 6:45pm *Restriction: Must be a major in Behavioral and Community Health department.*	Seats (Total: 11) ONLINE
0201	Sandra Saperstein W 4:00pm - 6:45pm *Restriction: Must be a Public Health Science major.*	Seats (Total: 29) ONLINE

HLTH434H **Introduction to Public Health Informatics**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in one of the following programs (Community Health; Public Health Science) ; and must have earned a minimum of 60 credits. Credit only granted for: HLTH434 or HLTH498E. Formerly: HLTH498E.

Provides an overview of the field of public health informatics and the influence of technology on the public's health and well-being. Emphasizes the application of various technologies and computer/internet applications to support public health research and practice, including strategies to address new and emerging threats.

0101	Sandra Saperstein W 4:00pm - 6:45pm	Seats (Total: 5) ONLINE

HLTH460 **Minority Health**

Credits: 3

Grading Method: Regular, Pass-Fail

Prerequisite: HLTH140, HLTH230, or HLTH366; or permission of SPHL-Behavioral & Community Health department. Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

Health concerns of U.S. ethnic minority groups and factors placing them at elevated risk for disease and injury. Health education concepts and strategies to reduce disparities between their health status and the health status of the general population.

Cross-listed with HLTH460H. Credit granted for HLTH460 or HLTH460H.

0101	Craig Fryer TuTh 3:30pm - 4:45pm	Seats (Total: 20) ONLINE
	Restriction: Must be a major in Behavioral and Community Health departm ent.	
0201	Craig Fryer TuTh 3:30pm - 4:45pm	Seats (Total: 31) ONLINE
	Restriction: Must be a Public Health Science major.	

HLTH460H **Minority Health**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: HLTH140, HLTH230, or HLTH366; or permission of SPHL-Behavioral & Community Health department. Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

Health concerns of U.S. ethnic minority groups and factors placing them at elevated risk for disease and injury. Health education concepts and strategies to reduce disparities between their health status and the health status of the general population.

Cross-listed with HLTH460. Credit granted for HLTH460 or HLTH460H.

0101	Craig Fryer TuTh 3:30pm - 4:45pm	Seats (Total: 3) ONLINE

HLTH489 **Field Laboratory Projects and Workshop**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

A course designed to meet the needs of persons in the field with respect to workshop and research projects in special areas of knowledge not covered by regularly structured courses.

Contact department for information to register for this course.

HLTH490 **Professional Preparation in Community Health**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in EPIB301, EPIB315, SPHL100, HLTH124, HLTH140, HLTH200, HLTH230, HLTH302, BSCI170, BSCI171, and BSCI201. Students must have successfully completed or concurrently complete HLTH364. Corequisite: Students must also enroll in HLTH420 and HLTH391. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

The development of skills necessary for joining the public health work force post-graduation, as well as assistance in obtaining an appropriate internship that will serve as a final semester, capstone experience. Students will be exposed to various relevant professional experiences, and will be afforded the opportunity to strengthen their own individual skills by selecting from a menu of skills-based learning modules that best suit their perceived needs.

0101	Tracy Zeeger TuTh 9:30am - 10:45am	Seats (Total: 28) ONLINE
0201	Tracy Zeeger TuTh 11:00am - 12:15pm	Seats (Total: 28) ONLINE

HLTH491 **Community Health Internship**

(Perm req)

Credits: 12 Grading Method: Regular

Prerequisite: Minimum grade of C- in HLTH420 and HLTH490. Restriction: Must have completed all program requirements and be in the last semester of the Community Health degree program.

Integrating theory with practice in a community health setting.

0101	Tracy Kennedy Contact instructor or department for details. Class time/details on ELMs	Seats (Total: 60) ONLINE

HLTH492 **BS/MPH Community Health Internship**

Credits: 9 Grading Method: Regular

Prerequisite: Minimum grade of C- in HLTH490. Restriction: Must be a Community Health major who has been admitted to the combined BS/MPH degree program.

Integrating theory with practice in a community health setting.

0101	Tracy Kennedy Contact instructor or department for details. Class time/details on ELMs	Seats (Total: 10) ONLINE

HLTH609 **Public Health Journal Club**

Credits: 1

Grading Method: Regular, Audit

Includes discussion of recent literature from leading peer-reviewed journals on a specific psychosocial construct and health outcome, with students presenting two articles during the semester. The purpose of this course is to read and consider health constructs and outcomes from a multidisciplinary perspective.

0101	Barbara Curbow	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

HLTH652 **Quantitative Research Methods I in Public health**

(Perm req)

Credits: 3

Grading Method: Regular

Restriction: Must be in MPH: Community Health Education (Master's) program; or must be in Ph.D.: Public and Community Health (Doctoral) program. Credit only granted for: HLTH652 or HLTH688R. Formerly: HLTH688R.

Intermediate statistics and procedures in public health-related research for doctoral students. Focuses on applied statistics rather than theoretical, with emphasis on 1) how to apply statistical models, 2) how to perform the analysis with avialable software, and 3) how to interpret findings.

0101	Min Wang	Seats (Total: 10)
	Tu 4:00pm - 6:45pm	ONLINE

HLTH672 **Public Health Informatics**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Instructor permission is required for students not enrolled in a degree seeking program in the School of Public Health. Cross-listed with EPIB672. Credit only granted for: HLTH670 or HLTH671, HLTH672, EPIB 672. Formerly: HLTH670. Additional information: Course hashtag - #umdphi12.

A basic overview of Informatics and its application in a public health setting. The major goal is for students to understand the basic tools and building blocks needed to utilize this technology in order to improve their professional productivity

0101	Robert Gold, Sandra Saperstein	Seats (Total: 25)
	Tu 7:00pm - 9:45pm	ONLINE

HLTH688 **Special Problems in Health Education**

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

Contact department for information to register for this course.

HLTH688L **Special Problems in Health Education; Health Literacy**

Credits: 3 Grading Method: Regular, Audit

0101	Cynthia Baur W 4:00pm - 6:45pm	Seats (Total: 25) ONLINE

HLTH710 **Methods and Techniques of Research**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Stephen Nkansah Amankra Class time/details on ELMs	Seats (Total: 25) ONLINE
PLB1	Stephen Nkansah Amankra Class time/details on ELMs	Seats (Total: 10) ONLINE

Part of the MPH in Behavioral and Community Health program. Graduate students not admitted into this program must contact oes@umd.edu to determine registration eligibility.

HLTH712 **Applied Research Methods in Behavioral and Community Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: HLTH710.

Designed to build on the research skills obtained in HLTH710 and other fundamental research methods and statistics courses. Methods and problems that are commonly encountered in health education research will be discussed including examination of actual research studies. Complex behavioral research issues will be addressed with existing research data sets. With these data sets, students will develop an analytic plan and conduct data analysis.

0101	Bradley Boekeloo M 4:00pm - 6:45pm	Seats (Total: 10) ONLINE

HLTH776 **Community Health Program Evaluation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: HLTH710 and HLTH774. Restriction: Must be in a major within SPHL-Behavioral & Community Health department; or permission of instructor. Credit only granted for: HLTH775 or HLTH774 and HLTH776. Formerly: HLTH775.

An application of basic research methods, and the evaluation of community health programs. Students will evaluate the effectiveness of a community health intervention.

0101	Robert Feldman	Seats (Total: 25)
	Th 4:00pm - 6:45pm	ONLINE

HLTH778 **Internship in Public Health**

Credits: 1-4 Grading Method: Regular

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

0101	Evelyn King-Marshall	Seats (Total: 10)
	M 7:00pm - 9:00pm	Location: TBA

HLTH780 **Community Health**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: HLTH740 or HLTH780.

Overview of public health organizations, programs, and policies, including their structure and function, and their ability to change with changing community health needs.

0101	Sharon Desmond	Seats (Total: 25)
	Th 4:00pm - 6:45pm	ONLINE

HLTH786 **Capstone Project in Public Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed all required coursework; and permission of SPHL-Behavioral & Community Health department. Restriction: Must be in a major within SPHL-Behavioral & Community Health department.

Capstone experience providing opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Contact department for information to register for this course.

HLTH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

HLTH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

HLTH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

HNUH University Honors Fall 2020

HNUH100 **Gateway Seminar**

Credits: 1 Grading Method: Regular

First-semester orientation and exploration seminar required of all UH students.

Restricted to first-semester UH students.

0101	Christine Jones, Lauren Cannady Tu 12:30pm - 1:45pm	Seats (Total: 22) ONLINE
0102	Christine Jones, Lauren Cannady Tu 5:00pm - 6:15pm	Seats (Total: 22) ONLINE
0103	Christine Jones, Lauren Cannady W 1:00pm - 2:15pm	Seats (Total: 22) ONLINE
0104	Lauren Cannady, Christine Jones W 5:00pm - 6:15pm	Seats (Total: 22) ONLINE
0105	Christine Jones, Lauren Cannady Th 12:30pm - 1:45pm	Seats (Total: 22) ONLINE
0106	Lauren Cannady, Christine Jones Th 5:00pm - 6:15pm	Seats (Total: 22) ONLINE

0201	Christine Jones, Zachary Dorner Tu 12:30pm - 1:45pm	Seats (Total: 22) ONLINE
0202	Zachary Dorner, Christine Jones Tu 5:00pm - 6:15pm	Seats (Total: 22) ONLINE
0203	Zachary Dorner, Christine Jones W 1:00pm - 2:15pm	Seats (Total: 22) ONLINE
0204	Christine Jones, Zachary Dorner W 5:00pm - 6:15pm	Seats (Total: 22) ONLINE
0205	Zachary Dorner, Christine Jones Th 12:30pm - 1:45pm	Seats (Total: 22) ONLINE
0206	Christine Jones, Zachary Dorner Th 5:00pm - 6:15pm	Seats (Total: 22) ONLINE
0301	Christine Jones, Fatemeh Hosseini Tu 12:30pm - 1:45pm	Seats (Total: 22) ONLINE
0302	Fatemeh Hosseini, Christine Jones Tu 5:00pm - 6:15pm	Seats (Total: 22) ONLINE
0303	Fatemeh Hosseini, Christine Jones W 1:00pm - 2:15pm	Seats (Total: 22) ONLINE
0304	Fatemeh Hosseini, Christine Jones W 5:00pm - 6:15pm	Seats (Total: 22) ONLINE
0305	Fatemeh Hosseini, Christine Jones Th 12:30pm - 1:45pm	Seats (Total: 22) ONLINE
0306	Christine Jones, Fatemeh Hosseini Th 5:00pm - 6:15pm	Seats (Total: 22) ONLINE
0401	Vineeta Singh, Christine Jones Tu 12:30pm - 1:45pm	Seats (Total: 22) ONLINE
0402	Vineeta Singh, Christine Jones Tu 5:00pm - 6:15pm	Seats (Total: 22) ONLINE

0403	Vineeta Singh, Christine Jones W 1:00pm - 2:15pm	Seats (Total: 22) ONLINE	
0404	Vineeta Singh, Christine Jones W 5:00pm - 6:15pm	Seats (Total: 22) ONLINE	
0405	Vineeta Singh, Christine Jones Th 12:30pm - 1:45pm	Seats (Total: 22) ONLINE	
0406	Vineeta Singh, Christine Jones Th 5:00pm - 6:15pm	Seats (Total: 22) ONLINE	

HNUH218A **Pursuits of Happiness: Ordinary Lives in the American Revolution**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Credit only granted for: HNUH218A or HIST137.

Dedicated to telling the stories of ordinary people in the American Revolution, to recovering the voices and experiences of all the founders of this country whose lives and contributions have been obscured by our tendency to worship a dozen or so well-to-do and well-educated men in suits as if they alone conceived and executed the American Revolution and the founding of the United States. So we'll be talking this semester about the marginalized, the downtrodden, the rank and file, the rabble - all the people who never make it onto monuments or money. The point of this is to allow us all to recognize the fundamental fact that fighting a Revolution is a collective act that requires a genuine mass movement. Declaring independence on a piece of parchment on a summer's day in Philadelphia in 1776 doesn't mean anything unless tens of thousands of people are willing to support that cause and fight to make it a reality. To revolt, then, is not an individual act - it's for crowds, for mobs, and for whole communities to do together. Declaring independence is a fundamentally cooperative act.

Restricted to UH students matriculating in Fall 2020 or later.

0101	Richard Bell MW 9:00am - 9:50am F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Richard Bell MW 9:00am - 9:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Richard Bell MW 9:00am - 9:50am F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

HNUH218X **Uprising, Riot, Revolt: Violence in Story and Theory**

Credits: 3 Grading Method: Regular General Education: DSHU, DVUP

How does violence connect to revolution? Is violence the result of lone wolf actors, oppressive social structures, or just blind fate? Is it a side-effect of revolution or its driving force? Is violence a way to fight injustice, or is it a problem of evil? Why is one person's uprising another person's riot? In this seminar, we will explore literature, politics, and religion to debate the meaning and causes of violence. By examining the writings of a prison psychiatrist, historians, activists, theorists, and theologians alongside classic and contemporary literary works, we will disrupt common understandings of violence. In conducting interviews with community members, engaging in classroom debate, and sharing ideas in a project-poster session, we will investigate violence in the UMD community and wider DC area, and propose ways toward revolutionary change.

Restricted to UH students matriculating in Fall 2020 or later.

0101	Margaret Elwell TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE
0201	Margaret Elwell TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE

HNUH218Z **Soundtrack to Revolution: Black Protest Music from Slave Ship to Soundcloud**

Credits: 3 Grading Method: Regular General Education: DSHU, DVUP

This course invites students to hear a tradition of black protest music that reverberates from the slave ship to Soundcloud and beyond. Together we will ponder how black people have created, performed, broadcast, and mobilized music for protest, self-making, community-building, cultural critique, agitation, venting, healing, and joy. We will listen to live and studio performances by Paul Robeson, Mahalia Jackson, Billie Holiday, Abbey Lincoln and Max Roach, Nina Simone, Fela Kuti, Marvin Gaye, Aretha Franklin, Bob Marley, Michael Jackson, Public Enemy, NWA, Lil' Kim, Lauryn Hill, Beyonce, Kendrick Lamar, Frank Ocean, and others. Among the questions we will ponder are the following: What does protest sound like? Does all protest happen on picket lines and must all protest music entail overt political statements set to melody? At various historical junctures, how have black people mobilized music (and art more broadly) to shape and impact their political conditions? What can music accomplish that artforms like literature and visual art cannot? How have various social justice and liberation movements--including Abolitionism, the Civil Rights Movement, the Black Power Movement, the Movement for Black Lives, and beyond--deployed music? How has new media technology transformed protest (music)? How does revolution sound to you?

Restricted to UH students matriculating in Fall 2020 or later.

0101	La Marr Bruce W 4:00pm - 6:30pm	Seats (Total: 20) ONLINE

HNUH219T **Transform Maryland: Theories and Models of Consulting**

Credits: 3 Grading Method: Regular General Education: DSHS

Additional information: This course is part of a two-semester Theory & Practice Track seminar.

This consulting practicum theory course is designed to prepare students with the theoretical and practical background they need to engage in the art of consulting to make real change in the world. The broad number of topics covered make this course both challenging and rewarding, with concepts drawn from business, engineering, psychology, sociology, communications, literature, and more. These topics blend multiple academic disciplines into an analytical, systems, and abstract analysis approach to problem solving. Students will develop an understanding of organizations, how groups make decisions, and how one can influence those decisions. This is driven by the development of two parallel analysis techniques: quantitative and qualitative. The quantitative analysis techniques include such areas as systems design, data analysis, and process modeling. These are paired with qualitative techniques, including organizational analysis, decision modeling, and stakeholder analysis. This course is self-contained in that the topics covered are assessed within the course, but it is paired with and designed to be taken prior to Transform Maryland: Theories into Practice (HNUH219P), wherein students undertake a real-world consulting engagement for their client--the University of Maryland--to improve its business processes.

Restricted to UH students matriculating in Fall 2020 or later.

0101	Jeffrey Hollingsworth, Joseph Drasin, Megan Benefiel Tu 4:00pm - 6:30pm	Seats (Total: 20) TWS 0310

HNUH228A **Peace in our time? Conflict and Conflict Resolution in International Politics**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Is the world getting more peaceful? There are currently civil wars raging in much of the world and millions of people have fled these wars as refugees or internally displaced persons. Terrorist attacks kill thousands, and can occur in any corner of the planet. At the same time many actors use strategies such as peacekeeping, mediation, promotion of human rights and post-conflict justice to resolve conflicts and build peace. In this course, we will examine conflict, peace, and conflict resolution in contemporary international politics. We will interrogate concepts such as peace, conflict, and violence, the different forms that these phenomena can take, and how we can measure their occurrence. We will discuss theoretical explanations for why individuals and groups have disputes and why these actors choose to use violence (or not) in these disputes and examine these arguments in specific cases. We will analyze conflict resolution strategies such as mediation, peacekeeping, and human rights promotion both theoretically and empirically. This discussion will allow students to develop an argument for whether the world is getting more peaceful, why it is or is not, and what this could mean about the future of violence and peace.

Restricted to UH students matriculating in Fall 2020 or later.

0101	David Cunningham	Seats (Total: 60)
	TuTh 11:00am - 12:15pm	ONLINE

HNUH228Y **Interrogating Issues of Piracy/Pirates amidst the Shadowy Landscapes of War & Peace**

Credits: 3 Grading Method: Regular General Education: DSHS, DVUP

Who are pirates and what constitutes piracy in a given era? To what extent do changing notions of piracy reflect major societal transformations at the national, regional and global levels, as well as reveal the contested and often overlapping boundaries of war and peace? How can we use pirates/piracy as a "tool" to engender an historical, economic, political, social, and cultural understanding of global forces and change? Do the legends and myths surrounding infamous pirates represent the realities and relationships of early and new forms of piracy? Could piracy be conceived as a form of counterculture? To what extent do piracy, rivalry, state building, war-making, peace-making all belong on the same continuum? This course examines pirates/piracy as an integral part of major global processes. We will investigate when and why piracy emerged and flourished, and how lawbreakers and lawmakers relate to one another on the murky terrains of power, then explore alternative ways to (re)configure who is a pirate and what constitutes piracy, especially within the dynamics of today's neo-liberal globalization.

Restricted to UH students matriculating in Fall 2020 or later.

0101	Dorith Grant-Wisdom	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

HNUH238A **Deliberative Democracy**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

How do we change our politics, save democracy, and move beyond the "us vs. them" culture that divides us? This course begins with the premise that how we talk to one another and debate controversial issues can promote the public good or erode it in irreparable ways. Students in each class session will put principles of public dialogue into practice as they learn deliberative theories and skills that can help save democracy. Class readings will turn to historical case studies to frame the most controversial political issues we face today.

Restricted to UH students matriculating in Fall 2020 or later.

0101	Shawn Parry-Giles	Seats (Total: 60)
	MW 2:00pm - 3:15pm	ONLINE

HNUH238Y **Information Weaponization: Thinking Critically in a Changing World**

Credits: 3 Grading Method: Regular General Education: DSHS

Contemporary challenges--such as climate change, food, energy and water security, and deadly virus transmission--demand that people think critically. These challenges are often complex and interrelated; for example, society's increasing demand for energy contributes to human-induced climate change, which in turn, limits freshwater and food supplies, and which in turn, could contribute to the worldwide spread of disease. While many societal challenges are seriously impacting local, regional and global communities, an increasing availability of information has contributed to what many call a "Post-Truth Era," where emotions and personal beliefs override scientifically valid evidence and explanations. We will consider the institutional use of post-truth a form of information weaponization. This course asks how information weaponization impacts the evaluation of valid lines of evidence and explanations. How do we evaluate and what is needed to improve individuals' evaluations of claims in the post-truth era? Combatting mythological and unproductive thinking in the face of current change requires increased digital literacy. We will learn enhanced reasoning, evaluation skills, and critical thinking.

Restricted to UH students matriculating in Fall 2020 or later.

0101	Doug Lombardi	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

HNUH248A **Identity, Places, & Spaces**

Credits: 3 Grading Method: Regular General Education: DSHS, DVUP, SCIS

Students in this interdisciplinary course will explore multi-layered issues related to privilege and oppression through their own life experiences via exposure to theory, research, film, memoirs, and current events. Students will evaluate and critique common assumptions about the meaning and experiences of privilege and oppression using Intersectionality theory as a guiding framework. The human experience related to various social identities (i.e., race, gender and gender identity, sexual orientation, social class, religion, age, and ability) will be addressed.

Restricted to UH students matriculating in Fall 2020 or later.

0101	Mia A Smith-Bynum TuTh 9:30am - 10:45am	Seats (Total: 60) ONLINE

HNUH248X **My Hometown, Our Wilderness: Ecology of Identity**

Credits: 3 Grading Method: Regular General Education: DSHU, DVUP

What has been the setting of your life? Suburbs? Cities? A farm? We may be used to thinking of environments as equal access across society, since everyone is free to visit our National Parks or spend a day at the beach. But there are striking ways in which identity affects our habitat. Race, class, gender, sexual preference, and other markers have strong influences on where we spend our time, what we eat, and how we work and relax. Suburbs, cities, wilds, and farms are not just physical places, they exhibit histories of social inclusion and exclusion. For example, the money and free time of affluent Americans serves as a portal to leisure spaces that would be inaccessible to working-class Americans who lack the ability to take time off, drive or fly long distances, and pay for it all. We'll profile identity ecology through the poetry of African American urban naturalists, essays of wilderness-loving men like Edward Abbey, the comedy of white environmental outrage, and the racialized class tensions in resorts like Aspen, CO. This survey will support your in-depth personal exploration of identity ecology in a collaborative video media project.

Restricted to UH students matriculating in Fall 2020 or later.

0101	Heidi Scott TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE
0201	Heidi Scott TuTh 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

HNUH248Y **How Do You "Man Up?": Men, Masculinity, and Mental Health**

Credits: 3 Grading Method: Regular General Education: DSHS, DVUP

In August 2018, the American Psychological Association released guidelines regarding the best practices for researchers and mental health professionals when working with boys and men. Many reacted with the question, "are we treating masculinity as a mental health issue?" This course aims to answer that question by taking a historical perspective on how American society has viewed masculinity from the beginning of psychology as a field of study until present day. An intersectional approach will be taken to better understand how race, ethnicity, sexual orientation, gender identity, and socioeconomic status impact men and masculinity. We will address the questions: How does one prove their manhood? How much of masculinity is biological versus socialized? What experiences are unique to men? And how do psychologists and mental health professionals understand and address mental health concerns among men?

Restricted to UH students matriculating in Fall 2020 or later.

0101	Monica Kearney	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

HONR Honors Fall 2020

HONR208P **Honors Seminar; Tolkien: Mythmaker**

Credits: 3 Grading Method: Regular General Education: DSHU

0101	Ingrid Satelmajer	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	ONLINE

HONR209G **Honors Seminar; Elements of Drawing for Non-Majors**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Matthew McLaughlin	Seats (Total: 16)
	MW 9:00am - 11:30am	ONLINE

HONR218B **Honors Seminar; Making a Difference: The Lives and Words of Leaders Who Shape Our Time**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

0101	Kevin Klose	Seats (Total: 25)
	TuTh 9:30am - 10:45am	ONLINE

HONR218L **Honors Seminar: Language and Mind**

Credits: 3 Grading Method: Regular CORE: HO General Education: DSHU

0101	Andrea Zukowski	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	ONLINE

HONR218M **Honors Seminar; Elements of Music Composition for Non-Majors**

Credits: 3 Grading Method: Regular General Education: DSSP

0101	William Evans	Seats (Total: 18)
	Tu 2:00pm - 4:30pm	ONLINE

0201	William Evans	Seats (Total: 18)
	Tu 5:30pm - 8:00pm	ONLINE

HONR218T **Honors Seminar; Political Theater: On Stage and in Washington**

Credits: 3 Grading Method: Regular General Education: DSHU

This seminar may have a fee of up to $40.

0101	Nelson Pressley	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

HONR218V **Disability Culture and Life Narratives**

Credits: 3 Grading Method: Regular

Let's talk about disability. What does it mean? How has society's view of disability evolved? What is disability culture? This course examines these questions through the psychosocial and cultural history of disability through life narratives and real-world exploration. We will trace the history of perspectives on disability, examining disability identity and culture, issues such as race, class, gender, as well as the intersections of identities in disability. We will use a cultural lens to understand the evolution of attitudes toward disability in American society, and critically evaluate contemporary social, political, and theoretical perspectives on disability.

0101	Jessica McKechnie	Seats (Total: 20)
	M 2:00pm - 4:30pm	ONLINE

HONR229Q **Honors Seminar; Making Decisions in an Uncertain World**

Credits: 3 Grading Method: Regular General Education: DSSP

0101	Michael Fu	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

HONR238C **The Future of Energy and Climate Policy**

Credits: 3 Grading Method: Regular CORE: IE General Education: DSSP

0101	Tyson Slocum	Seats (Total: 25)
	W 3:00pm - 5:30pm	ESJ 2208

HONR238R **Honors Seminar: Terrorism**

Credits: 3 Grading Method: Regular CORE: SH General Education: DSHS

0101	Howard Smead M 4:00pm - 6:30pm	Seats (Total: 20) BPS 1250

HONR248J **Honors Seminar; A Most Human Nation**

Credits: 3 Grading Method: Regular General Education: DSHU, DVUP, SCIS

Students who have taken HHUM205 should contact the instructor for permission.

0101	Ingrid Satelmajer TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE

HONR248V **Honors Seminar; Music and Poetry: Sound and Sense**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

0101	Robert Gibson W 2:00pm - 4:30pm	Seats (Total: 25) ONLINE

HONR249D **Honors Seminar; How Can We Study Environmental Problems?**

Credits: 3 Grading Method: Regular General Education: DSHS

0101	Dana Fisher MW 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

HONR249L **The Historical Development of London**

Credits: 3 Grading Method: Regular CORE: SH

Contact department for information to register for this course.

HONR258E **Honors Seminar; Creating the Future through Systemic Thinking and Design**

Credits: 3 Grading Method: Regular General Education: DSSP

0101	Gerald Suarez MW 3:30pm - 4:45pm	Seats (Total: 20) ONLINE

HONR258O **Honors Seminar; The Kinesiological Bases of Skilled Performance**

Credits: 3 Grading Method: Regular

0101	Seppo Iso-Ahola	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	SPH 1312

HONR259C **Honors Seminar: Fearfully Great Lizards: Topics in Dinosaur Research**

Credits: 3 Grading Method: Regular CORE: PS General Education: DSNS

0101	Thomas Holtz	Seats (Total: 20)
	MWF 10:00am - 10:50am	ONLINE

HONR259G **Honors Seminar; Fairness, Inequality, and Democracy**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Allan Drazen	Seats (Total: 20)
	MW 2:00pm - 3:15pm	ONLINE

HONR268N **Honors Seminar; Cracking the Secrets of the Universe Using Computers: Re-discovering the Higgs and Searching for Invisible Matter**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSNS, DSSP, SCIS

This course is part of two-semester Honors research seminar. Part two of this series will be offered in the Spring 2021 semester. For more information about the course, please visit physics.umd.edu/courses/Honr268N/. For permission to enroll, please contact Dr. Shabnam Jabeen at Jabeen@umd.edu.

0101	Shabnam Jabeen, Sarah Eno	Seats (Total: 20)
	MW 11:00am - 12:15pm	ONLINE

HONR269E **Honors Seminar; Exploring Key Issues of Globalization**

Credits: 3 Grading Method: Regular General Education: DSHS, DVUP, SCIS

0101	Dorith Grant-Wisdom	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

HONR269T **Honors Seminar: Understanding U.S. Foreign Policy toward Afghanistan**

Credits: 3 Grading Method: Regular CORE: SB, D General Education: DSHS, SCIS

This is a Global Classroom course. There will be approximately 3 to 4 classes where this course will meet on a Saturday or Sunday morning for videoconferencing with students in Kabul, Afghanistan instead of meeting at its normal weekly time on Thursday nights (exact dates and times are TBA).

0101	Temim Nusraty	Seats (Total: 15)
	Th 6:30pm - 9:00pm	ONLINE

HONR269V **Honors Seminar; Virus Hunting: Emerging Diseases, Social Conteoversies and Nano-Technologies**

Credits: 3 Grading Method: Regular General Education: DSNS

0101	James Culver	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

HONR278D **Honors Seminar; National Security Dilemmas**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Daniel Rosenthal	Seats (Total: 22)
	M 7:00pm - 9:45pm	ONLINE

HONR278G **Honors Seminar; Exploring How Foreign Policy Is Developed**

Credits: 3 Grading Method: Regular General Education: DSHS

0101	Temim Nusraty	Seats (Total: 20)
	M 6:30pm - 9:00pm	ONLINE

HONR278Z **Honors Seminar; The Philosophy and Practice of Yoga**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

0101	Susan Dwyer	Seats (Total: 25)
	Tu 2:00pm - 3:15pm	ONLINE
	Th 2:00pm - 3:15pm	ONLINE

HONR279M **How Does the Brain Speak? Insight from Neuroimaging and Brain Damage**

Credits: 3 Grading Method: Regular CORE: IE General Education: DSHS, SCIS

We speak at an average rate of 200 words per minute! An amazing number of processes occur when we speak: conceptualizing what to say, selecting the words that convey our ideas, selecting the tone of the message, constructing grammatical sentences, uttering the sounds that make up the sentences, and so on. How do our brains enable us to speak creatively at such a rapid rate? And how did we find out about neural operations involved in speaking? This course uses a multidisciplinary approach to address these issues, drawing from neuroscience, brain imaging, psycholinguistics, speech pathology and cognitive neuropsychology.

0101	Yasmeen Shah	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

HONR288O **Honors Seminar: Why Do Things Fail?**

Credits: 3 | Grading Method: Regular | CORE: PS | General Education: DSNS, SCIS

Restriction: This course is for non-engineering majors only. High school matn and science are adequate for understanding of the material.

0101	Kevin Calabro	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

HONR289A **The Ecology and Evolutionary Biology of Infectious Disease**

Credits: 3 | Grading Method: Regular | CORE: LS | General Education: DSNS

0101	Tammatha O'Brien, Marcia Shofner	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

HONR299A **The Visual Culture of Europe in the "Age of Exploration"**

Credits: 3 | Grading Method: Regular | CORE: SB | General Education: DSHU

Prerequisite: N.A.

Some of the most groundbreaking developments in the visual culture of Europe are associated with the so-called Age of Exploration, a period stretching from the early 1400s to the early 1700s. During this period, and thanks to technological advances in shipbuilding and navigation, Europeans began traveling around the globe as never before, primarily in search of new trading routes. In the course of these travels, they encountered numerous lands and peoples they had never imagined existed. In this course, we look at the reflections of these encounters in the visual arts and the material culture of the period - from the growth of private collections of rarities, to the spiritual dilemmas arising from the recognition that the world as the Europeans had known it was gone forever. In this course, we look at some of the reflections of these encounters in the visual arts and the material culture of the period - from the growth of private collections of wonders, to works of art that express spiritual dilemmas arising from the recognition that the world as the Europeans had known it was gone forever.

0101	Aneta Georgievska-Shine	Seats (Total: 20)
	W 2:00pm - 4:30pm	ONLINE

HONR299F **Honors Seminar; Financial Crises: The Foundation of Global Tension**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

0101	Behzad Gohari	Seats (Total: 24)
	W 6:00pm - 8:30pm	ONLINE

HONR299G **Honors Seminar; Revolution, Regret, and Reform: The People and Principles of the American Political Tradition**

Credits: 3 Grading Method: Regular General Education: DSHS

0101	Robert Chiles	Seats (Total: 20)
	Th 6:00pm - 8:30pm	ONLINE

HONR299H **Honors Seminar; Cutting Edge Science: Understanding Current Scientific Issues**

Credits: 3 Grading Method: Regular

0101	Boualem Hammouda	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

HONR348J **Advanced Honors Seminar; Contemporary Social Issues**

Credits: 3 Grading Method: Regular General Education: DVCC

A series of seminars, often interdisciplinary and sometimes team taught. The subjects will vary from semester to semester.

0101	Howard Smead	Seats (Total: 20)
	W 4:00pm - 6:30pm	TWS 0310

HONR349V **Honors Colloquium; Dubai: Global Immersion Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary and sometimes team taught. Subjects may vary.

Contact department for information to register for this course.

HONR358A **Honors Practicum**

Credits: 3 Grading Method: Sat-Fail

For student section leaders of HONR100 or HONR200.

Contact department for information to register for this course.

HONR358B **Honors Practicum**

Credits: 3 Grading Method: Sat-Fail

For student section leaders of HONR100 or HONR200.

Contact department for information to register for this course.

HONR358C **Honors Practicum**

Credits: 3 Grading Method: Sat-Fail

For student section leaders of HONR100 or HONR200.

Contact department for information to register for this course.

HONR359A **Honors Workshop**

Credits: 3 Grading Method: Sat-Fail

Honors workshops are small seminar classes which concentrate on skill development.

Contact department for information to register for this course.

HONR359L **Honors Workshop; Leading Honors Colloquium**

(Perm req)

Credits: 2 Grading Method: Sat-Fail

Honors workshops are small seminar classes which concentrate on skill development.

Contact department for information to register for this course.

HONR368A **Advanced Honors Seminar; MGA Legislative Seminar**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSPW

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Cross-listed with ENGL381. Credit only granted for one of the following: ENGL381 or HONR368A. Admission to this course is by application only.

0101	Thomas Lowderbaugh	Seats (Total: 15)
	Tu 3:30pm - 6:00pm	ONLINE

HONR378A **Advanced Honors Seminar; U.S. Diplomacy and Policymaking**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Jointly offered with FGSM 360. Credit granted for FGSM360 or HONR378A. Students must be in the Global Fellows Program to register.

0101	William Usher, Paul Maykish	Seats (Total: 20)
	Th 7:30pm - 10:00pm	ONLINE

HONR378B **Advanced Honors Seminar; Responses to Global Challenges**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Cross-listed with FGSM380. Credit granted for FGSM380 or HONR378B. Students must be in the Global Fellows Program to register. An examination of global issues and responses primarily from the perspective of the practitioner. The focus will be on social, humanitarian, and human rights issues in different global contexts.

0101	Rhoda Margesson	Seats (Total: 20)
	W 5:30pm - 8:30pm	ONLINE

HONR378C **Political Engagement and Advocacy**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Federal Fellows Program; and permission of instructor. Cross-listed with: FGSM310.

An examination of questions and issues in the practice of political engagement and advocacy. Guest lecturers drawn from political, civic engagement, and advocacy arenas will visit class and participate in discussions.

0101	Kathleen Mogelgaard Tu 6:00pm - 9:00pm	Seats (Total: 21) ONLINE

HONR378D **Advanced Honors Seminar; Science Diplomacy: Foreign Policy and Science, Technology, and Innovation**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Cross-listed with FGSM370. Credit granted for FGSM370 or HONR378D. Students must be in the Global Fellows Program to register. An exploration of the critical roles scientific knowledge and technological innovation play in the formation and implementation of foreign policy issues, including energy and climate change, public health, space and innovation, and economic development.

0101	Griffin Thompson, Jonathan Margolis W 5:30pm - 8:30pm	Seats (Total: 20) ONLINE

HONR378E **Advanced Honors Seminar; Public Health Policy**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Students must be in the Federal Fellows Program to register. Cross-listed with FGSM320. Credit granted for FGSM320 or HONR378E.

0101	Samuel Kessel Tu 3:30pm - 6:30pm	Seats (Total: 21) ONLINE

HONR378G **Advanced Honors Seminar; Homeland and National Security Policy**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Jointly offered with FGSM 330. Credit granted for FGSM330 or HONR378G. Students must be in the Federal Fellows Program to register.

0101	John Dermody, Casie Kagalis	Seats (Total: 20)
	M 6:00pm - 9:00pm	ONLINE
	Students must be in the Federal Fellows Program to register.	

HONR378J **Advanced Honors Seminar; Energy and Environmental Policy**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Students must be in the Federal Fellows Program to register. Cross-listed with FGSM340. Credit granted for FGSM340 or HONR378J.

0101	Ed Fendley	Seats (Total: 20)
	M 3:30pm - 6:30pm	ONLINE

HONR378K **Advanced Honors Seminar; Critical Regions and International Relations**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Cross-listed with FGSM350. Credit granted for FGSM350 or HONR378K. Students must be in the Global Fellows Program to register. An examination of international relations and foreign policy challenge s in critical regions.

0101	Danusia Hubah	Seats (Total: 20)
	Th 7:00pm - 10:00pm	ONLINE

HONR378M **Water Security and Global Health Challenges**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor. Cross-listed with: FGSM390.

An examination of questions and issues of water security and global health. Expert practitioners will also visit class and participate in discussions.

0101	Jonathan Margolis	Seats (Total: 21)
	W 3:00pm - 6:00pm	ONLINE

HONR379 **Honors Independent Study**

(Perm req)

Credits: 3 Grading Method: Regular

Involves reading or research directed by individual faculty, especially in areas outside of the student's major. Open only to University honors students.

Available only to University honors students.

Contact department for information to register for this course.

HONR379A **Honors Independent Study**

Credits: 2 Grading Method: Regular

Involves reading or research directed by individual faculty, especially in areas outside of the student's major. Open only to University honors students.

Contact department for information to register for this course.

IDEA Academy for Innovation & Entrepreneurship Fall 2020

IDEA101 **The Carillon Studio: Creative Problem Solving and Designing Your Maryland Experience**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Carillon Communities Program.

Students learn creative problem solving and collaborative strategies that will drive academic success and empower students to tackle big questions.

Restricted to students in the Carillon Communities. Alternating face-to-face/ online class meeting. Please see instructor for details.

0101	Brooke Smith **Meets August 31, 2020 - November 20, 2020** Tu 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 17) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0102	Lauren Ruszczyk **Meets August 31, 2020 - November 20, 2020** Tu 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 17) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0103	Erica Estrada-Liou **Meets August 31, 2020 - November 20, 2020** Th 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 21) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0104	Marc Steren **Meets August 31, 2020 - November 20, 2020** Th 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 17) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0105	Rachel Thompson **Meets August 31, 2020 - November 20, 2020** W 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 20) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0106	Daniella Bienstock **Meets August 31, 2020 - November 20, 2020** Tu 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 17) ONLINE ESJ 0202 ONLINE	 Discussion Discussion

0107	Amanda Baker **Meets August 31, 2020 - November 20, 2020** Tu 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 16) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0108	Christina Hnatov **Meets August 31, 2020 - November 20, 2020** Tu 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 16) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0109	Jordan Adams **Meets August 31, 2020 - November 20, 2020** W 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 17) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0110	Leslie Krafft **Meets August 31, 2020 - November 20, 2020** W 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 17) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0111	Melissa Del Rios **Meets August 31, 2020 - November 20, 2020** W 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 20) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0113	Ann Smith **Meets August 31, 2020 - November 20, 2020** Th 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 17) ONLINE ESJ 0202 ONLINE	 Discussion Discussion

0115	Aspen Shackleford **Meets August 31, 2020 - November 20, 2020** Th 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 21) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0116	Dawn Simounet **Meets August 31, 2020 - November 20, 2020** Th 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 17) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0117	Xinyi Zhang **Meets August 31, 2020 - November 20, 2020** Th 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 21) ONLINE ESJ 0202 ONLINE	 Discussion Discussion
0118	Amanda Bogdan **Meets August 31, 2020 - November 20, 2020** W 4:00pm - 5:30pm M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 17) ONLINE ESJ 0202 ONLINE	 Discussion Discussion

IDEA258A **Special Topics in Innovation; Becoming a Design Thinker: Mindsets and Tools for Innovation**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics in innovation

This introductory course allows students to try on the behaviors of a creative problem-solver, leveraging the methods and tools of design thinking, a human-centered innovation process. This is a highly experiential, often experimental course. All majors are encouraged to enroll.

0101	Mira Azarm, Christina Hnatov W 4:00pm - 5:30pm	Seats (Total: 30) ONLINE	

IDEA258C **Special Topics in Innovation; Designing Ethical Campaigns**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics in innovation

This course will introduce students to and immerse them in the methods running an ethical campaign. Through our campus, local, state, national government, we have seen how dirty politics can get. Throughout the semester students will be able to apply their learnings to design a campaign that can make tangible differences, but stay true to their core values. We will explore the different functions and methods it takes to run an ethical campaign. Our assignments and activities will allow for students to have hands-on engagement with stakeholders at UMD to create and test their own ethical campaign.

0101	Mira Azarm	Seats (Total: 25)
	Th 4:00pm - 5:30pm	ONLINE

IDEA258D **Special Topics in Innovation; Explorations in Design**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics in innovation

"Explorations in Design" gives students the opportunity to apply their unique backgrounds to the realm of design. Students will engage in hands-on learning with real world applications to incorporate design thinking into everyday life. By exploring each stage of the design process (from ideating to prototyping), students will develop a final project to pitch at the end of the semester.

0101	Brooke Smith	Seats (Total: 15)
	M 5:00pm - 6:15pm	ONLINE

IDEA258F **Special Topics in Innovation; Adventures in Coaching & Facilitating Design Thinking**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Special topics in innovation

Build your coaching skills and understanding of design tools and methods in Adventures in Coaching & Facilitating Design Thinking. Actively learn and apply design thinking methods, and coach people through those methods in a series of public-facing Academy- offered workshops. Continue to improve on those skills through practice and peer feedback.

0101	Mira Azarm, Brooke Smith	Seats (Total: 5)
	F 11:45am - 1:00pm	ONLINE
	Class time/details on ELMs	ONLINE

IDEA379A **Advanced Topics in Innovation; Design Your Purpose**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Advanced topics in innovation

0101	Dean Chang, Christina Hnatov	Seats (Total: 8)
	Class time/details on ELMs	ONLINE

IDEA398A **Special Topics in Coaching; Coaching in STICs**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Special topics in coaching others

Contact department for information to register for this course.

IDEA398B **Special Topics in Coaching; Innovation Coaching**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Special topics in coaching others

Contact department for information to register for this course.

IDEA398C **Special Topics in Coaching; Carillon Peer Mentors**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Special topics in coaching others

0101	Brooke Smith, Melissa Del Rios	Seats (Total: 18)
	Meets August 31, 2020 - November 20, 2020	
	F 2:00pm - 2:50pm	ONLINE
	Class time/details on ELMs	ONLINE

IDEA498 **Independent Study: Experiments in Innovation**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Apply design thinking and/or lean startup concepts to your own real-world project, which may involve a partner organization. This course requires a high degree of self-direction in all aspects of the project including defining specific milestones and deliverables. There will be regular coaching from an Academy for Innovation and Entrepreneurship team member.

Contact department for information to register for this course.

IMMR Immigration Studies Fall 2020

IMMR200 **Introduction to Immigration and Migration Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduces concepts and theoretical interpretations about the causes of international migration; provides an historical overview of the main flows of immigration to the U.S.; analyzes economic, political, social, and cultural aspects that impact the immigrants' settlement process.

0101	Julie Greene MW 2:00pm - 3:15pm	Seats (Total: 30) ONLINE	

IMMR219C **Immigration Policy, Immigrant Lives**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP, SCIS

Cross-listed with: ANTH264. Credit only granted for: ANTH264 or IMMR219C.

An examination of the phenomenon of international migration, or immigration. Students develop awareness of how immigration has been framed in the general public and examined by social science disciplines, most prominently anthropology. Examination of case studies of different immigrant groups in distinct geographic contexts will illuminate the varied incorporation experiences of immigrants into U.S. society.

0101	Christina Getrich Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Christina Getrich Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Christina Getrich Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

IMMR394 **Growing Up Asian American: The Asian Immigrant Family and the Second Generation**

Credits: 3 Grading Method: Regular

Cross-listed with: AAST394, AMST324. Credit only granted for: AAST394, AAST398E, AMST324, AMST328V, IMMR319G or IMMR394. Formerly: AAST398E.

An interdisciplinary course examines the experiences of children of Asian immigrants in the U.S., focusing on intergenerational dynamics in the Asian immigrant family, their intersections with race, gender, class, sexuality, and religion, and how these shape second-generation Asian American life. Topics include identity and personhood, the model minority myth and education, work and leisure, language and communication, filiality and disownment, mental health and suicide.

0101	Yeram Cheong	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

INAG Institute of Applied Agriculture Fall 2020

INAG099 **Cooperative Education**

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Restriction: Co-op is open to sustainable agriculture and agricultural business management students who have completed a minimum of 45 credit hours, have a minimum GPA of 2.0, and have advisor's permission. Cooperative Education, the culminating 22-week field experience in your program, is a collaborative partnership between the Institute of Applied Agriculture and the employer to provide a quality academic and practical training for students. Each student's co-op will vary according to the unique career direction the student wishes to pursue and is intended to accompany seminars and activities previously acquired in the IAA program. Upon completion of the course, students will have established contacts in the industry and substantial documentation to develop a personal portfolio.

0101	Meredith Epstein	Seats (Total: 15)
	Contact instructor or department for details.	

INAG100 **Introduction to Plant Science**

Credits: 4 Grading Method: Regular

Restriction: Must be a student in the Institute of Applied Agriculture; or permission of AGNR-Institute of Applied Agriculture department. Credit only granted for: INAG100, PLSC100, or PLSC101.

A general introduction to plant science designed to provide the students with a working knowledge of the fundamental structures and processes of plants. Content includes plant anatomy, physiology, genetics and environmental relationships.

0101	Kenneth Ingram MWF 8:00am - 8:50am W 9:00am - 10:50am	Seats (Total: 7) SPH 1312 PLS 1153	 Lab
0102	Kenneth Ingram MWF 8:00am - 8:50am F 9:00am - 10:50am	Seats (Total: 7) SPH 1312 PLS 1153	 Lab

INAG102 **Agricultural Entrepreneurship**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority in enrollment will be given to students within the Institute of Applied Agriculture. May not count toward any BMGT major or minor requirement.

This course introduces fundamental concepts related to launching a profitable agricultural business. Topics include idea generation, opportunity recognition, conducting feasibility studies, assembling the entrepreneurial team, and financing the new venture, among others. Students will learn knowledge and skills relevant to starting a new agricultural business.

0101	Temitope Fajingbesi MWF 12:00pm - 12:50pm	Seats (Total: 35) ONLINE	

INAG103 **Agricultural Marketing**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority in enrollment will be given to students within the Institute of Applied Agriculture. Course cannot be used to fulfill a requirement for a Robert H. Smith School of Business major or minor.

Principles of market demand are used to develop a consumer oriented market strategy for agricultural businesses. Topics include market structures, target marketing, market segmentation, niche marketing and direct marketing. Market concepts unique to agriculture products are also covered.

0101	Meredith Epstein MWF 11:00am - 11:50am	Seats (Total: 25) ONLINE	

INAG106 **Pesticide Use and Safety**

Credits: 2 Grading Method: Regular, Audit

Restriction: Must be in a major in AGNR-Institute of Applied Agriculture department; or must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority enrollment will be given to students in the IAA program or to students in the College of Agriculture and Natural Resources (AGNR).

An overview of pesticide use and safety. Topics include environmental protection, labeling, personal safety, first aid, formulation and chemistry, equipment, disposal, storage, record-keeping and liability. The course prepares students to take the Maryland State test for a private applicator's license.

0101	Ronald Myers Class time/details on ELMs	Seats (Total: 30) ONLINE

INAG110 Oral Communication

Credits: 3 Grading Method: Regular, Audit General Education: FSOC

Credit only granted for: COMM107, COMM200, INAG110, JOUR130, THET285.

A study of how perception, self-concept, and verbal and nonverbal communications affect the communication process as it emerges in the workplace. The course provides skill training in speech writing, public speaking, group communication, interpersonal communication, listening, and responding.

0101	Eric Dunning MWF 8:00am - 8:50am	Seats (Total: 19) ONLINE
0201	Amy Fisher MWF 8:00am - 8:50am	Seats (Total: 19) ONLINE
0301	Robert Ballenger MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0401	Eric Dunning MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0501	Amy Fisher MWF 9:00am - 9:50am	Seats (Total: 19) ONLINE
0701	Amy Fisher MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE

0801	Shala Larson MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
0901	Chelsea Mays-Williams MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE
1001	George Kurtzweil MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
1101	Eric Dunning MWF 11:00am - 11:50am	Seats (Total: 19) ONLINE
1201	Robert Ballenger MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
1301	Shala Larson MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
1401	George Kurtzweil MWF 12:00pm - 12:50pm	Seats (Total: 19) ONLINE
1501	Shala Larson MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
1601	Samuel Rubin MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
1701	Chelsea Mays-Williams MWF 1:00pm - 1:50pm	Seats (Total: 19) ONLINE
1801	Chelsea Mays-Williams MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
1901	George Kurtzweil MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
2001	Samuel Rubin MWF 2:00pm - 2:50pm	Seats (Total: 19) ONLINE
2101	Jo Ellen Barnhart MW 3:00pm - 4:15pm	Seats (Total: 19) ONLINE

2201	Jo Ellen Barnhart M 6:00pm - 8:45pm	Seats (Total: 19) ONLINE
2301	Jo Ellen Barnhart W 6:00pm - 8:45pm	Seats (Total: 19) ONLINE
2401	Amy Fisher Tu 8:00am - 9:15am Th 8:00am - 9:15am	Seats (Total: 19) PLS 1140 ONLINE
2501	Eric Dunning TuTh 8:00am - 9:15am	Seats (Total: 19) ONLINE
2601	Amy Fisher Tu 9:30am - 10:45am Th 9:30am - 10:45am	Seats (Total: 19) PLS 1140 ONLINE
2701	Eric Dunning TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
2801	Heather McHale TuTh 9:30am - 10:45am	Seats (Total: 19) ONLINE
2901	Shala Larson TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
3001	Chelsea Mays-Williams TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
3101	Robert Ballenger TuTh 11:00am - 12:15pm	Seats (Total: 19) ONLINE
3201	Robert Ballenger TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
3301	Shala Larson TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE
3401	George Kurtzweil TuTh 12:30pm - 1:45pm	Seats (Total: 19) ONLINE

3501	George Kurtzweil TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
3601	Jo Ellen Barnhart TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
3701	Samuel Rubin TuTh 2:00pm - 3:15pm	Seats (Total: 19) ONLINE
3801	Samuel Rubin TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
3901	Jo Ellen Barnhart TuTh 3:30pm - 4:45pm	Seats (Total: 19) ONLINE
4001	Samuel Rubin TuTh 5:00pm - 6:15pm	Seats (Total: 19) ONLINE

INAG110S **Oral Communication**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSOC

Credit only granted for: COMM107, COMM200, INAG110, JOUR130, THET285.

A study of how perception, self-concept, and verbal and nonverbal communications affect the communication process as it emerges in the workplace. The course provides skill training in speech writing, public speaking, group communication, interpersonal communication, listening, and responding.

Restricted to College Park Scholars.

0601	Robert Ballenger MWF 10:00am - 10:50am	Seats (Total: 19) ONLINE

INAG123 **People, Planet, and Profit: Digging Into Sustainable Agriculture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, SCIS

Investigates the principles and practices of sustainable agriculture and their relationship to the greater food system. Explores the social (people), environmental (planet), and economic (profit) impacts of agriculture - from challenges to opportunities. INAG123 applies the principles of sustainability to various agricultural production practices and systems - at a range of different scales - to see what lessons these varied models can offer. Along the way, we will consider domestic issues such as food safety and distribution, food justice, cultural relevance, biodiversity, farming communities, and effects on local economies.

Students will have in person field trips scheduled and must provide their own transportation (dates scheduled for Sept. 16 and 30; Oct. 14 and 28, 2020).

0101	Meredith Epstein W 2:00pm - 5:00pm Contact instructor or department for details.	Seats (Total: 25) ONLINE

INAG199 **Special Problems**

Credits: 1-3 Grading Method: Regular

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department. A detailed study, including a written report, involving a current issue in an agricultural area that relates to the student's major. The study is conducted under the direction of a faculty member. A maximum of three credit hours of special problems may be applied toward graduation.

0101	Geoffrey Rinehart TBA	Seats (Total: 10) PBR 1102
0201	Meredith Epstein Class time/details on ELMs	Seats (Total: 10) ONLINE
0301	Kenneth Ingram Class time/details on ELMs	Seats (Total: 10) ONLINE
0501	Temitope Fajingbesi Class time/details on ELMs	Seats (Total: 10) ONLINE
0601	Glori Hyman Class time/details on ELMs	Seats (Total: 10) ONLINE

INAG199C **Special Problems; Special Problems in AgriScience**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Students must successfully complete an accredited high school agriculture program with a minimum of 4 agriculture courses with a minimum grade of B in each course. Demonstrates the application of scientific principles of agriculture by developing and presenting an oral report on a capstone project relevant to ccurrent agriculture issues.

0101	Glori Hyman	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

INAG199D **Special Problems; Agricultural Tractor Operations and Maintenance**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: IAA students are given priority. Other UMD students will be granted permission to enroll if seats are available. Class will be held at the Central Maryland Research and Education Center (CMREC), Clarksville Facility, 4240 Folly Quarter Road, Ellicot City, MD 21042. Dates are October 3 & 4, 2020 with October 10 & 11, 2020 as rain dates. Students will need to provide their own transportation to and from the facility. This class introduces students to the operation and maintenance of agricultural tractors and farm equipment. Students learn to safely and efficiently operate tractors, connect and use implements, perform regular maintenance, and handle materials.

0101	Jeff Semler	Seats (Total: 12)
	Contact instructor or department for details.	

INAG201 **Agricultural Human Resources Management**

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: May not count toward any BMGT major or minor requirement.

The course introduces students to the study and application of the basic principles of human relations and personnel management. A variety of approaches to recruiting, training, delegating, motivating, and appraising employees are among the topics discussed.

0101	Kenneth Ingram	Seats (Total: 30)
	TuTh 9:30am - 10:45am	CCC 1100

INAG203 **Agricultural Finance**

Credits: 3 Grading Method: Regular, Audit

Restriction: Students at the Institute of Applied Agriculture (IAA); or students at the College of Agriculture and Natural Resources (AGNR); or permission may be granted to other students based on available space. Additional information: Course cannot be used to fulfill a requirement for a Robert H. Smith School of Business major or minor.

This course introduces fundamental concepts related to the financial management of an agricultural business. Topics include financial statement analysis, financial planning, the relationship between risk and return, the time value of money, costs associated with borrowed funds, sources of capital, financial markets and intermediaries in agriculture, and personal finance, among others. Students will gain financial knowledge and skills necessary for managing a profitable agricultural business.

0101	Temitope Fajingbesi	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	SPH 1312

INAG224 **Greenhouse and Plant Production Management**

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: This course is open to students in AGNR. Priority enrollment will be given to students in the Institute of Applied Agriculture. All other majors will be granted permission based on available space. Credit only granted for: INAG 114 or INAG 224.

Principles of managing greenhouses--structures, coverings, lighting, irrigation, heating and cooling systems--and their effects on plant production. Plant propagation methods and environments will be analyzed and practiced.

0101	Kenneth Ingram	Seats (Total: 7)
	TuTh 2:00pm - 3:50pm	ANS 0504

INAG226 **Diseases of Ornamentals and Turf**

Credits: 3 Grading Method: Regular, Audit

Recommended: Completion of one of the following is recommended: PLSC 253, PLSC 254, INAG 107, PLSC 305. Additional information: Priority in enrollment will be given to students within the Institute of Applied Agriculture.

The course will cover various topics such as plant pathology, disease control practices, and an in depth coverage of the major diseases of ornamentals and turfgrasses in the Mid-Atlantic region. Emphasis will be placed on identification of disease signs and symptoms. Over 50 diseases will be covered during the semester.

0101	Geoffrey Rinehart	Seats (Total: 9)	
	TuTh 12:30pm - 1:20pm	PBR 1102	
	Th 1:30pm - 3:30pm	PBR 1102	Lab

INAG231 **Insects of Ornamentals and Turf**

Credits: 3 Grading Method: Regular, Pass-Fail

Recommended: PLSC253, PLSC254, or PLSC305; or INAG107. Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority enrollment will be given to students in the IAA program.

A study of the major insect pests and beneficial insects of ornamental plants and turfgrasses in the Mid-Atlantic region. The student will be responsible for insect identification, life history, and control practices of approximately 100 insects. An insect collection consisting of both insect pests and beneficial insects is required.

0101	Geoffrey Rinehart	Seats (Total: 9)	
	WF 10:00am - 10:50am	BPS 1243	
	M 9:00am - 10:50am	PBR 1102	Lab

INAG237 **Surveying and GPS Applications in Agriculture**

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-College of Agriculture & Natural Resources. Additional information: Course is open to Institute of Applied Agriculture students and permission will be granted to others in the College of Agriculture and Natural Resources based on available seats. IAA student must have completed INAG104.

The principles of land measurement, using conventional surveying techniques to determine distance, elevation change or topography; Global Positioning System (GPS) devices; and mapping, utilizing Graphical Information Systems (GIS), will be the focus of this course. Students will use surveying equipment and GPS receivers and other data collection instruments to collect land data features. Data will be mapped and analyzed using software including: Trimble GPS Pathfinder Office, and ESRI ArcGIS software. Students will download and integrate available on-line geo-referenced map images or other data to support the development of their GPS collected data. Spatial analysis software will be used to map problem areas of field agronomic factors.

0101	Justin Mathias	Seats (Total: 10)	
	W 11:00am - 12:50pm	ANS 0509	
	F 11:00am - 12:50pm	ANS 0509	Lab

INAG242 **Golf Course Design and Construction**

Credits: 3 Grading Method: Regular General Education: DSSP

An appreciation and understanding of the game of golf is obtained through lectures on the history, organizations, and rules of the game. Golf course design theories, great architects and their courses, and construction specifications are discussed. Students will complete two golf course design projects.

0101	Kenneth Ingram	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	SPH 1312	
	W 3:00pm - 4:50pm	SPH 1312	Lab

INAG253 **Agricultural Strategic Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Recommended: INAG252.

Introduces the fundamental concepts and applications of strategic communication in agricultural organizations. Topics include strategic communication planning; communication and culture; communication and change; managing internal and external communication; and corporate responsibility. Students will learn how to use communication to accomplish organizational goals.

0101	Chelsea Mays-Williams	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

INAG288 **Internship**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

On-site internship training in the student's major area of study. Students must complete a minimum of 320 working hours at an approved work site. Course work also includes weekly written assignments and a site visit assessment.

I201	Geoffrey Rinehart	Seats (Total: 5)
	Class time/details on ELMs	ONLINE
I202	Meredith Epstein	Seats (Total: 5)
	Class time/details on ELMs	ONLINE
I203	Kenneth Ingram	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

I204	Shala Larson Class time/details on ELMs	Seats (Total: 5) ONLINE
I205	Heather McHale Class time/details on ELMs	Seats (Total: 5) ONLINE
I206	Roy Walls Class time/details on ELMs	Seats (Total: 5) ONLINE
I207	Temitope Fajingbesi Class time/details on ELMs	Seats (Total: 5) ONLINE

INAG289 **Internship Experience & Professional Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Professional development and reflective analysis of the experience from the Practicum (INAG 288). Based on their 320-hours of internship work experience, students will write an internship report and analysis, deliver an oral presentation, and develop professional skills and materials needed to enter their careers.

Prerequisite: INAG288. Restriction: Must be enrolled in the Institute of Applied Agriculture students; or permission of the Institute of Applied Agriculture.

0101	Glori Hyman M 3:00pm - 5:00pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

INAG299B **Supervised Work Experience; Internship II**

Credits: 1 Grading Method: Regular

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department.

Contact department for information to register for this course.

INFM Information Management Fall 2020

INFM600 **Information Environments**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

An exploration of various models and methodologies used to capture and deploy internal and external information and knowledge in a number of settings; organizational analysis in terms of information creation, flow, sharing, conservation, and application to problem solving; internal and external influences on the management of information and knowledge; various information flows; information management in a variety of settings.

0102	Ping Wang	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INFM603 **Information Technology and Organizational Context**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must not have completed LBSC671 or LBSC690; and permission of INFO-College of Information Studies.

Application of communication and information technologies to support work processes, including technology-enhanced communication networks, computer-supported collaborative work, decision-support systems, interactive systems, and systems analysis. Acquisition of information systems and their integration into the organization.

0101	Douglas Lay	Seats (Total: 30)
	M 6:00pm - 8:45pm	ONLINE

INFM620 **Introduction to Strategic Information Management**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM612; or LBSC631; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Strategic management is the comprehensive collection of tasks, activities, and processes organizations use to coordinate and align resources and actions with its mission, vision, and strategy. Due to changes occurring in our global landscape, the integration of business and technology is compelling organizations to move beyond traditional, reactive, and silo-based data management approaches to a managed, predictive approach that treats information as a strategic asset and uses it to create business value. To meet challenges of this hyper-competitive environment, this course will provide you with an introduction to the strategic management of information assets for competitive differentiation and sustained business success.

IM01	Ping Wang	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

INFM700 **Information Architecture**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM603; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Principles and techniques of information organization and architecture for the Web environment. Structured description of digital resources, including data modeling techniques, metadata schemes, and user-oriented navigation systems.

IM01	Donal Heidenblad M 2:00pm - 4:45pm	Seats (Total: 40) ONLINE

INFM719 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular

Intensive individual study under faculty supervision.

Contact department for information to register for this course.

INFM737 **Information Management Capstone Experience**

Credits: 3 Grading Method: Sat-Fail

Prerequisite: INFM736; and must have earned a minimum of 27 credits in the MIM Program. Or permission of instructor. Restriction: Must be in Information Management (Master's) program; and permission of INFO-College of Information Studies.

The Information Management Capstone Experience I and II are the culminating experience of the Master of Information Management program, taken in the students final two semesters. The capstone experience provide students with the opportunity to integrate and synthesize the knowledge and skills acquired throughout their MIM course work while working in a real world Information Management project. These courses must be taken in succession.

IM01	David Loshin W 6:00pm - 8:45pm	Seats (Total: 40) ONLINE

INFM757 **Organizational and Business Process Modeling**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed at least 9 credits in the College of Information Studies; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INFM718V OR INFM757. Formerly: INFM718V.

General principles of modeling, including methods for modeling organizational and business process for information applications and strategy development. Approaches to evaluating models based on their accuracy and usefulness.

IM01	Vedat Diker	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

INFM799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Intensive individual research course under the supervision of a faculty member.

Contact department for information to register for this course.

INST Information Studies Fall 2020

INST123 **Databases for All**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

An introduction to relational databases for students with no previous programming experience. Provides a means for students of diverse backgrounds to successfully learn how to store, retrieve, and maintain data in relational databases. Topics include a brief comparison of database systems with an emphasis on relational databases, fundamental relational database concepts, and data types. Includes technical approaches to accessing information stored in relational databases.

0101	Pamela Duffy, Vedat Diker	Seats (Total: 150)
	TuTh 12:30pm - 1:45pm	ONLINE

INST126 **Introduction to Programming for Information Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in MATH115; or must have math eligibility of MATH140 or higher; or permission of instructor. Restriction: Must not have completed INST326; and must be in Information Science program.

An introduction to computer programming for students with very limited or no previous programming experience. Topics include fundamental programming concepts such as variables, data types, assignments, arrays, conditionals, loops, functions, and I/O operations.

0101	Satyarth Praveen	Seats (Total: 60)
	Class time/details on ELMs	ONLINE

0102	Philip Piety Class time/details on ELMs	Seats (Total: 60) ONLINE
0103	Carrie Lindeman Class time/details on ELMs	Seats (Total: 50) ONLINE
0104	Joel Chan Class time/details on ELMs	Seats (Total: 50) ONLINE

INST152 **"Fake Checking": Battling Misinformation and Disinformation in the Real World**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DSSP

Examining the phenomenon of "fake news" using the principles of information literacy, students will develop their skills in locating, analyzing, and evaluating different information sources -- in the classroom, in their personal lives, and in the workplace.

0101	Ursula Gorham-Oscilowski Class time/details on ELMs	Seats (Total: 150) ONLINE

INST154 **Apollo at 50**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSHS, SCIS

Examines Apollo mission, one of the greatest engineering accomplishments of all time, in which Neil Armstrong walked on the moon. Since the mission, people have asked: if we can land on the moon, why can't we eliminate poverty? Why can't we cure cancer? Why can't we prevent global warming? Asks what were the social, political, financial, scientific, engineering, operational, and human aspects of the Apollo program that came together to make the moon landings possible?

0101	Douglas Oard TuTh 5:00pm - 6:15pm	Seats (Total: 150) ONLINE

INST155 **Social Networking**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Credit only granted for: INFM289I or INST155. Formerly: INFM289I.

Introduces methods for analyzing and understanding how people use social media - social networking websites, blogging and microblogging, and other forms of online interaction and content generation - and their societal implications. Introduces students to the science and social science of network analysis. Through real world examples, including analysis of their own social networks, students develop skills for describing and understanding the patterns and usage of services like Facebook, Twitter, YouTube, and others.

0101	Jennifer Golbeck	Seats (Total: 150)	
	Class time/details on ELMs	ONLINE	

INST201 **Introduction to Information Science**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSHS

Credit only granted for: INST201 or INST301. Formerly: INST301.

Examining the effects of new information technologies on how we conduct business, interact with friends, and go through our daily lives. Understanding how technical and social factors have influenced the evolution of information society. Evaluating the transformative power of information in education, policy, and entertainment, and the dark side of these changes.

0101	M Sauter	Seats (Total: 34)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0102	M Sauter	Seats (Total: 33)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0103	M Sauter	Seats (Total: 33)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0104	Jessica Vitak	Seats (Total: 100)	
	Class time/details on ELMs	ONLINE	
0201	M Sauter	Seats (Total: 34)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0202	M Sauter	Seats (Total: 33)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

0203	M Sauter	Seats (Total: 33)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0301	Laria Rogers	Seats (Total: 34)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0302	Laria Rogers	Seats (Total: 33)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0303	Laria Rogers	Seats (Total: 33)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
FC01	Elizabeth Bonsignore	Seats (Total: 20)	
	TuTh 7:30pm - 8:45pm	MCB 1207	
	Restricted to students in Freshmen Connection.		

INST208L **Special Topics in Information Studies; Linux Command Line Tools**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Covers special topics in information studies.

0101	Donal Heidenblad, Betzalel Moskowitz	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	

INST208M **Special Topics in Information Studies**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Covers special topics in information studies.

0123	Pamela Duffy, Vedat Diker	Seats (Total: 15)	
	Contact instructor or department for details.		
0154	Douglas Oard	Seats (Total: 15)	
	Contact instructor or department for details.		

0201	M Sauter, Laria Rogers Contact instructor or department for details.	Seats (Total: 15)
0311	Galina Madjaroff Contact instructor or department for details.	Seats (Total: 15)
0326	Gabriel Cruz, Aric Bills Contact instructor or department for details.	Seats (Total: 15)
0327	Pamela Duffy Contact instructor or department for details.	Seats (Total: 15)
0335	Susannah Paletz, Ge Gao Contact instructor or department for details.	Seats (Total: 15)
0354	Kathy Weaver Contact instructor or department for details.	Seats (Total: 15)
0362	Caro Williams-Pierce, Wayne Lutters Contact instructor or department for details.	Seats (Total: 15)
0377	Alex Leitch Contact instructor or department for details.	Seats (Total: 15)

INST301 **Introduction to Information Science**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSHS

Restriction: Must be in Information Science program; and restricted to students in the Information Science Program on the Universities at Shady Grove campus. Credit only granted for: INST201 or INST301.

Examining the effects of new information technologies on how we conduct business, interact with friends, and go through our daily lives. Understanding how technical and social factors have influenced the evolution of information society. Evaluating the transformative power of information in education, policy, and entertainment, and the dark side of these changes.

ESG1	Joyce Garczynski Class time/details on ELMs *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 60) ONLINE

INST309 **Independent Study in Information Science**

(Perm req) Credits: 1-3 Grading Method: Regular

Individual independent study of an aspect of information science, selected according to student interest and need in consultation with a member of the iSchool faculty. Repeatable to 6 credits if content differs.

Contact department for information to register for this course.

INST311 **Information Organization**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Information Science program.

Examines the theories, concepts, and principles of information, information representation and organization, record structures, description, and classification. Topics to be covered in this course include the methods and strategies to develop systems for storage, organization, and retrieval of information in a variety of organizational and institutional settings, as well as policy, ethical, and social implications of these systems.

0101	Katy Lawley Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0102	Katy Lawley Tu 11:00am - 12:15pm Th 12:30pm - 1:45pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0103	Katy Lawley Tu 11:00am - 12:15pm Th 2:00pm - 3:15pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0104	Ryan O'Grady Class time/details on ELMs	Seats (Total: 75) ONLINE	
0201	Katy Lawley MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0202	Katy Lawley MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 33) ONLINE ONLINE	 Discussion

0203	Katy Lawley MW 1:00pm - 1:50pm F 3:00pm - 3:50pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
ESG1	Galina Madjaroff Th 10:00am - 12:00pm Class time/details on ELMs *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 53) ONLINE ONLINE	 Discussion

INST314 **Statistics for Information Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in STAT100 and MATH115 (or higher). Restriction: Must be in the Information Science program. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201.

Basic concepts in statistics including measure construction, data exploration, hypothesis development, hypothesis testing, pattern identification, and statistical analysis. The course also provides an overview of commonly used data manipulation and analytic tools. Through homework assignments, projects, and in-class activities, you will practice working with these techniques and tools to create information resources that can be used in individual and organizational decision-making and problem-solving.

0101	Babak Fotouhi Class time/details on ELMs Class time/details on ELMs	Seats (Total: 39) ONLINE ONLINE	 Discussion
0102	Babak Fotouhi Class time/details on ELMs Class time/details on ELMs	Seats (Total: 38) ONLINE ONLINE	 Discussion
0103	Babak Fotouhi Class time/details on ELMs Class time/details on ELMs	Seats (Total: 38) ONLINE ONLINE	 Discussion
0106	Aditya Ravindra Bhat Class time/details on ELMs	Seats (Total: 60) ONLINE	
0201	Eric Newburger MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 39) ONLINE ONLINE	 Discussion

0202	Eric Newburger MW 2:00pm - 2:50pm F 3:00pm - 3:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
0203	Eric Newburger MW 2:00pm - 2:50pm F 4:00pm - 4:50pm	Seats (Total: 38) ONLINE ONLINE	 Discussion
ESG1	Lori Perine Class time/details on ELMs *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 53) ONLINE	

INST326 **Object-Oriented Programming for Information Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in INST126. Restriction: Must be in the Information Science program.

An introduction to programming, emphasizing understanding and implementation of applications using object-oriented techniques. Topics to be covered include program design and testing as well as implementation of programs.

Students who wish to register should contact the College of Information Studies.

0101	Aric Bills MW 9:30am - 10:45am	Seats (Total: 70) ONLINE	
0102	Joshua Westgard Class time/details on ELMs	Seats (Total: 60) ONLINE	
0103	Aric Bills TuTh 9:30am - 10:45am	Seats (Total: 70) ONLINE	
ESG1	Gabriel Cruz Class time/details on ELMs *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 53) ONLINE	

INST327 **Database Design and Modeling**

Credits: 3 Grading Method: Regular, Audit General Education: DSSP

Prerequisite: Minimum grade of C- in INST126. Restriction: Must be in the Information Science program. Credit only granted for: INST327 or BMGT402.

Introduction to databases, the relational model, entity-relationship diagrams, user-oriented database design and normalization, and Structured Query Language (SQL). Through labs, tests, and a project, students develop both theoretical and practical knowledge of relational database systems.

Students who wish to register should contact the College of Information Studies.

0101	Pamela Duffy TuTh 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 35) ONLINE ONLINE	 Discussion
0102	Pamela Duffy TuTh 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 35) ONLINE ONLINE	 Discussion
0103	Pamela Duffy TuTh 11:00am - 11:50am F 2:00pm - 2:50pm	Seats (Total: 35) ONLINE ONLINE	 Discussion
0201	Pamela Duffy MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 35) ONLINE ONLINE	 Discussion
0202	Pamela Duffy MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 35) ONLINE ONLINE	 Discussion
0203	Pamela Duffy MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 35) ONLINE ONLINE	 Discussion

INST335 **Organizations, Management and Teamwork**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in PSYC100. Restriction: Must be in Information Science program.

Examines principles, methods and types of leadership with an emphasis on goal setting, motivation, problem solving, and conflict resolution. Examines principles of developing teams and managing team projects through planning and execution, including estimating costs, managing risks, scheduling, staff and resource allocation, communication, tracking, and control. Trains students to recognize and capitalize on opportunities to use information to increase efficiency, improve performance, and support innovation within teams and organizations. Focuses on strategic use of emerging technologies and new information resources to execute information-enabled change.

Students who wish to register should contact the College of Information Studies.

0101	Susannah Paletz TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0102	Susannah Paletz TuTh 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0103	Susannah Paletz TuTh 2:00pm - 2:50pm F 3:00pm - 3:50pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0201	Ge Gao M 11:00am - 12:15pm W 11:00am - 12:15pm	Seats (Total: 34) ONLINE ONLINE	 Discussion
0202	Ge Gao M 11:00am - 12:15pm W 2:00pm - 3:15pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0203	Ge Gao M 11:00am - 12:15pm W 4:00pm - 5:15pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
ESG1	Chad Doran Class time/details on ELMs *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 53) ONLINE	

INST341 **Introduction to Digital Curation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in INST126, INST201, INST311, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program.

Explores various dimensions and contexts for digital curation, which includes all activities involving the management, representation and preservation of both born-digital and digitized information. Focuses on opportunities, challenges and demands of every-increasing digital data and networked information infrastructure.

0101	Edward Summers Class time/details on ELMs	Seats (Total: 50) ONLINE

INST346 **Technologies, Infrastructure and Architecture**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and 1 course with a minimum grade of C- from (INST326, CMSC131); and minimum grade of C- in INST327. Restriction: Must be in Information Science program; and permission of INFO-College of Information Studies. Credit only granted for: INST346 or BMGT405.

Examines the basic concepts of computer hardware, systems software, networking, client/server architectures, cloud computing, distributed systems, and high performance computing as applied to information rich domains. Technology and architectures will be discussed within the contexts of solving social issues, supportingscience, and conducting business operations. Current computing topics such as web environments, IoT, security, management, and policy will also be reviewed.

Students who wish to register should contact the College of Information Studies.

0101	Donal Heidenblad Class time/details on ELMs	Seats (Total: 60) ONLINE
0102	Dennis Frezzo Class time/details on ELMs	Seats (Total: 60) ONLINE
0103	Donal Heidenblad Class time/details on ELMs	Seats (Total: 60) ONLINE
0104	Donal Heidenblad Class time/details on ELMs	Seats (Total: 60) ONLINE
ESG1	Dennis Frezzo Class time/details on ELMs *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 50) ONLINE

INST352 **Information User Needs and Assessment**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST311. Restriction: Must be in Information Science program.

Focuses on use of information by individuals, including the theories, concepts, and principles of information, information behavior and mental models. Methods for determining information behavior and user needs, including accessibility issues will be examined and strategies for using information technology to support individual users and their specific needs will be explored.

0101	Courtney Douglass Class time/details on ELMs	Seats (Total: 60) ONLINE
0102	Fiona Jardine Class time/details on ELMs	Seats (Total: 60) ONLINE
0103	Fiona Jardine Class time/details on ELMs	Seats (Total: 60) ONLINE
0104	Ursula Gorham-Oscilowski Class time/details on ELMs	Seats (Total: 60) ONLINE

INST354 **Decision-Making for Information Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST314, MATH115, STAT100, and PSYC100. Restriction: Must be in Information Science program.

Examines the use of information in organizational and individual decision-making, including the roles of information professionals and information systems in informed decision-making through techniques such as data analysis and regression, optimization, sensitivity analysis, decision trees, risk analysis and business simulation models.

Students who wish to register should contact the College of Information Studies.

0101	Kathy Weaver Class time/details on ELMs	Seats (Total: 60) ONLINE

0102	Christopher Antoun Class time/details on ELMs	Seats (Total: 75) ONLINE
0103	Vikas Sahasrabudhe Class time/details on ELMs	Seats (Total: 50) ONLINE

INST362 **User-Centered Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST326; and minimum grade of C- in PSYC100. Restriction: Must be in Information Science program.

Introduction to human-computer interaction (HCI), with a focus on how HCI connects psychology, information systems, computer science, and human factors. User-centered design and user interface implementation methods discussed include identifying user needs, understanding user behaviors, envisioning interfaces, and utilizing prototyping tools, with an emphasis on incorporating people in the design process from initial field observations to summative usability testing.

Students who wish to register should contact the College of Information Studies.

0101	Stacy Surla MW 9:45am - 11:00am	Seats (Total: 60) ONLINE
0102	Caro Williams-Pierce TuTh 9:30am - 10:45am	Seats (Total: 60) ONLINE
0103	Wayne Lutters TuTh 2:00pm - 3:15pm	Seats (Total: 60) ONLINE
0104	Tamara Clegg MWF 11:00am - 12:15pm	Seats (Total: 60) ONLINE

INST364 **Human-Centered Cybersecurity**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST327, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program.

Cybersecurity is fundamentally a problem of human interaction with technology, but its technical challenges are better understood than its human challenges. This course is designed to give you an overview of human interactions with cybersecurity technology, from users to system designers. Using the information gleaned in this course, you should be able to make better predictions about how people react to cybersecurity policies and tools, and how those reactions shape organizational behavior. The earlier part of the course focuses on explanations for behavior, while the later parts of the course focus more on the development and evaluation of tools for assisting people in cybersecurity.

0101	Susan Campbell	Seats (Total: 75)
	Class time/details on ELMs	ONLINE
ESG1	Galina Madjaroff, Michaela Boyle	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	Restricted to students in the BSIS @ USG Program.	

INST366 **Privacy, Security and Ethics for Big Data**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: INST201 or INST301; or permission of instructor.

Evaluates major privacy and security questions raised by big data, Internet of things (IoT), wearables, ubiquitous sensing, social sharing platforms, and other AI-driven systems. Covers history of research ethics and considers how ethical frameworks can and should be applied to digital data.

0101	Jason Baron	Seats (Total: 100)
	Class time/details on ELMs	ONLINE

INST377 **Dynamic Web Applications**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST327, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program. Credit only granted for: INST377 or BMGT406.

An exploration of the basic methods and tools for developing dynamic, database-driven websites, including acquiring, installing, and running web servers, database servers, and connectability applications.

Students who wish to register should contact the College of Information Studies.

0101	Alex Leitch	Seats (Total: 50)
	MWF 11:00am - 11:50am	ONLINE

0102	Alex Leitch Class time/details on ELMs	Seats (Total: 50) ONLINE
0103	Alex Leitch Class time/details on ELMs	Seats (Total: 50) ONLINE
ESG1	William Farmer Class time/details on ELMs *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 40) ONLINE

INST408A **Special Topics in Information Science; Consumer Health Informatics**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information science.

Prerequisite: Minimum grade of C- in INST126, INST201, STAT100, MATH115, and PSYC100.

0101	Beth St Jean M 2:00pm - 4:45pm	Seats (Total: 50) ONLINE

INST408I **Special Topics in Information Science; Computational Journalism**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Selected topics in information science.

Prerequistes: Minimum grade of C- in INST126, INST201, STAT100, MATH115, and PSYC100. Cross-listed with JOUR479V and JOUR779V. Credit only granted for JOUR479V, JOUR779V, or INST408I.

0101	Naeemul Hassan M 10:00am - 12:45pm Class time/details on ELMs *Alternating face-to-face/online class meeting. Please see instructor fo details.*	Seats (Total: 8) KNI 3202 ONLINE

INST408O **Special Topics in Information Science; Project Management for Information Science**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information science.

ESG1	Arjav Shah	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	Restricted to students in the BSIS @ USG Program.	

INST408Q **Special Topics in Information Science; Information Professionals and the Law**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information science.

Contact department for information to register for this course.

INST414 **Data Science Techniques**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST314, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program.

An exploration of how to extract insights from large-scale datasets. The course will cover the complete analytical funnel from data extraction and cleaning to data analysis and insights interpretation and visualization. The data analysis component will focus on techniques in both supervised and unsupervised learning to extract information from datasets. Topics will include clustering, classification, and regression techniques. Through homework assignments, a project, exams and in-class activities, students will practice working with these techniques and tools to extract relevant information from structured and unstructured data.

0101	Abdirisak Mohamed	Seats (Total: 50)
	Class time/details on ELMs	ONLINE
0102	Wei Ai	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	ONLINE
0103	Jennifer Proctor	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

INST442 **Digital Curation Across Disciplines**

Credits: 3 Grading Method: Regular, Audit

Examines how to apply digital curation principles, tools, and strategies in managing diverse data collections and digital information in different disciplinary settings. Explores differences among data curation principles and practices across diverse settings, ranging from scientific organizations (such as business and academic research laboratories and computational science settings), to humanities-based institutions (such as cultural heritage organizations) to social science-based institutions (such as data-intensive professional environments).

0101	Katrina Fenlon	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

INST447 **Data Sources and Manipulation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST327, STAT100, MATH115, and PSYC100; and 1 course with a minimum grade of C- from (INST326, CMSC131). Restriction: Must be in Information Science program.

Examines approaches to locating, acquiring, manipulating, and disseminating data. Imperfection, biases, and other problems in data are examined, and methods for identifying and correcting such problems are introduced. The course covers other topics such as automated collection of large data sets, and extracting, transforming, and reformatting a variety of data and file types.

0101	William Farmer	Seats (Total: 50)
	Class time/details on ELMs	ONLINE
0102	Nekabari Sigalo	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

INST462 **Introduction to Data Visualization**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST314, MATH115, PSYC100, and STAT100. Restriction: Must be in Information Science program.

Exploration of the theories, methods, and techniques of visualization of information, including the effects of human perception, the aesthetics of information design, the mechanics of visual display, and the semiotics of iconography.

Students who wish to register should contact the College of Information Studies.

0102	Eric Newburger TuTh 9:30am - 10:45am	Seats (Total: 50) ONLINE
0103	Jennifer Golbeck Class time/details on ELMs	Seats (Total: 100) ONLINE

INST466 **Technology, Culture, and Society**

Credits: 3 Grading Method: Regular, Audit General Education: DVCC

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301). Restriction: Must be in the Information Science program.

Individual, cultural, and societal outcomes associated with development of information & communication technologies (ICTs), including pro- and anti-social factors. Unpacking how gender, race, ethnicity, sexual orientation, disabilities, and political affiliations affect consumption and production of online experiences. Unpacking how structures of dominance, power and privilege manifest at individual, institutional and cultural levels.

0101	Daniel Greene Class time/details on ELMs	Seats (Total: 60) ONLINE
0102	Daniel Greene Class time/details on ELMs	Seats (Total: 60) ONLINE
0103	Chad Doran Class time/details on ELMs	Seats (Total: 50) ONLINE

INST490 **Integrated Capstone for Information Science**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST311, INST314, INST326, INST327, INST335, INST346, INST352, INST362, PSYC100, STAT100, and MATH115. Restriction: Must be in Information Science program; and permission of INFO-College of Information Studies.

The capstone provides a platform for Information Science students where they can apply a subset of the concepts, methods, and tools they learn as part of the Information Science program to addressing an information problem or fulfilling an information need.

0102	Andrew Fellows MW 4:00pm - 5:15pm	Seats (Total: 40) ONLINE

0103	Richard Panzer Tu 6:00pm - 8:45pm	Seats (Total: 40) ONLINE
0104	Vedat Diker, Pamela Duffy W 2:00pm - 4:45pm	Seats (Total: 55) ONLINE

INST604 **Introduction to Archives and Digital Curation**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC604 or LBSC605.

Overview of the principles, practices, and applications in the archival and digital curation fields.

IM01	Caitlin Christian-Lamb Class time/details on ELMs	Seats (Total: 30) ONLINE

INST607 **Government Information**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INFM718E, INST607, or LBSC708E. Formerly: INFM718E and LBSC708E.

An introduction to the nature and scope of government information. Tracing the ongoing efforts of government agencies to offer information, services, and resources online, this course examines the nature, current impacts, and future impacts of E-government. More specifically, the course explores information and communication technologies designed to make government more open and transparent; the design, implementation, and evaluation of efficient, effective, and new government and governance mechanisms; the role of information institutions in supporting E-government; and the development and implementation of selected public facing E-government tools (e.g., portals, visualizations).

IM01	Jason Baron Class time/details on ELMs	Seats (Total: 30) ONLINE

INST608B **Special Topics in Information Studies; Master of Library and Information Science**

Credits: 1-3 Grading Method: Regular, Audit

Covers special topics in information studies.

This course is restricted to undergraduate InfoSci students who have been given permission to engage in graduate-level coursework. For more information please contact an InfoSci advisor.

0101	Joseph Sherren	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

INST608I **Special Topics in Information Studies**

Credits: 1-3 Grading Method: Regular, Audit

Covers special topics in information studies.

IM01	Jordan Boyd-Graber	Seats (Total: 5)
	Class time/details on ELMs	ONLINE
IM02	Amanda Lazar	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

INST610 **Information Ethics**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INFM718Q, INST610, or LBSC708I. Formerly: INFM718Q and LBSC708I.

Investigation of the diverse range of ethical challenges facing society in the information age. Ethical theories, including non-Western and feminist theories. Application of theories to information ethics issues.

IM01	Ana Ndumu	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST613 **Information and Human Rights**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

An examination of information as a human right, including topics: social, cultural, economic, legal, and political forces shaping information rights; the impact of information rights on information professions, standards, and cultural institutions; and information rights and disadvantaged populations.

IM01	Hannah Bergman	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST615 **Information Professionals and the Law**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC735 OR INST615. Formerly: LBSC735.

An exploration of the interrelated issues of the provision of and information literacy about legal information by information organizations and the impacts of legal issues, such as privacy and filtering, on the practice of information organizations that serve the public.

IM01	Ursula Gorham-Oscilowski	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST620 **Diverse Populations, Inclusion, and Information**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC620 OR INST620. Formerly: LBSC620.

Importance of equality of information access. Social, political, and technological barriers to information. Information needs of diverse and underrepresented populations. Principles of inclusive information services.

IM01	Renee Hill	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST627 **Data Analytics for Information Professionals**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

Skills and knowledge needed to craft datasets, perform quantitative and qualitative analyses, and develop information resources that bridge the gap between raw data and decision makers' needs.

IM01	Naeemul Hassan	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

INST630 **Introduction to Programming for the Information Professional**

Credits: 3

Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies.

An introduction to computer programming intended for students with no previous programming experience. Topics include fundamentals of programming and current trends in user interface implementation that are relevant to information professionals.

IM01	David Patrick	Seats (Total: 35)
	Th 6:00pm - 8:45pm	ONLINE

INST631 **Fundamentals of Human-Computer Interaction**

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: Must have completed or be concurrently enrolled in INST630; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST631 or LBSC795. Formerly: LBSC795.

Principles of human-human and machine-machine communication as a basis for models of human-computer communication. Issues related in input/ output devices, conceptual models, levels of control, metaphor and personification, adaptability, and intensionality/extensionality.

IM01	Jonathan Lazar	Seats (Total: 60)
	Tu 6:00pm - 7:30pm	ONLINE
	Class time/details on ELMs	ONLINE

INST639C **Practical Skills in HCI; Makerspace**

Credits: 1

Grading Method: Sat-Fail,
Audit

Current industry practice in the HCI and UX field involves being familiar with many practical skills and specialized software. In this repeatable course, HCIM students will be able to acquire some of these vital practical skills in order to be better prepared for joining industry upon graduation. Furthermore, this will also be an opportunity for students to develop their portfolio for future job hunts. Offered in both Fall and Spring semesters, the intention is for these "practical skills" to be taught by professional instructors with expert knowledge. The content of the course will vary from semester to semester, but here is a sample of topics: Graphic and visual design and communication; UX design and research in games; Voice and gestures; UX mockups and wireframing tools; Practical web design and technologies; UX project management software.

Meets on Wednesday, 10/21, 10/28, 11/04, 11/11, and 11/18. Five weeks of in-depth readings paired with practical, hands-on design work using Fusion 360 and Tinkercad to explore how digital fabrication of physical objects works through the internet. Readings explore the history of makerspaces, their connection to hacking culture, supply systems and product design chains. Work with weekly critique to rapidly prototype designs for production on campus 3D Printers.

0101	Alex Leitch **Meets October 21, 2020 - November 18, 2020** W 2:00pm - 4:45pm	Seats (Total: 10) ONLINE

INST643 **Curation in Cultural Institutions**

Credits: 3 Grading Method: Regular

Restriction: Permission of INFO-College of Information Studies.

An overview of the principles, practices, and current debates in the management, care and representation of digital artifacts in libraries, archives, and museums.

IM01	Joseph Sherren W 2:00pm - 4:45pm	Seats (Total: 30) ONLINE

INST650 **Facilitating Youth Learning in Formal and Informal Environments**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST650 or LBSC640. Formerly: LBSC640.

The historical, organizational, and contemporary contexts of formal and informal learning spaces; the principles of teaching, learning, and information literacy that underlie the formal and informal learning spaces; and the leadership role that information professionals can play within their schools, libraries and communities.

CT01	Mega Subramaniam Class time/details on ELMs	Seats (Total: 5) ONLINE
IM01	Mega Subramaniam Class time/details on ELMs	Seats (Total: 25) ONLINE

INST651 **Promoting Rich Learning with Technology**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST651 or LBSC642. Formerly: LBSC642.

Exploration of how technology can be used to promote rich learning experiences, with a particular focus on youth populations. Assessment of the how, when, and why of infusing technology into the teaching and learning process.

Course is restricted to the Youth Experience Certificate Cohort.

CT02	Philip Piety	Seats (Total: 5)
	Class time/details on ELMs	ONLINE
	Course is restricted to students in the School Library Certificate program.	
IM01	Philip Piety	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

INST661 **Introduction to Game, Entertainment, and Media Analytics**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of the instructor.

With the continuing global growth in the Game, Entertainment, and virtual/augmented reality and immersive experiences industries, entertainment providers increasingly depend on data analytics to maintain a competitive edge while continuing to improve the customer experience. This course provides an overview of the Game, Entertainment, and Media (GEM) industries, discuss the relationships between the entertainment providers and the entertainment consumers, and explore the analytical techniques used to maximize the overall value to both the providers and consumers. The course will focus on the uses of analytics methods such as personalization, recommendation, clustering and segmentation, behavioral analytics, etc., will discuss core data management and data architecture concerns, and examine how big data infrastructure can support scalability as data volumes grow and as streaming speeds accelerate. In addition we review socio-technical aspects of entertainment, especially in the areas of cyberpsychology, social networks, and information policy concerns such as privacy protection, fraud, equity, and national security concerns.

IM01	David Loshin	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

INST682 **Personal Health Informatics & Visualization**

Credits: 3

Grading Method: Regular, Audit

Personal Health Informatics cover a broad concept that encompasses an array of approaches to collect, store, share, analyze, and reflect on personal health data. Not only health care providers are relying on Health Technologies to improve patient care, people are increasingly using health devices and apps in their everyday life. Individuals have started using new technologies to collect data, increase awareness, and reflect on and change their behaviors. They also use various tools for curiosity and fun. This course will provide an overview of this exciting field and examine how social and behavioral theories can be applied to create effective health applications.It is difficult to create health technologies that can successfully be integrated into people's daily life due to many obstacles in individuals' data collection, integration, self-reflection, and sharing practices. Understanding these challenges is an important part of designing Health Technologies. Therefore, this course will cover HCI and design thinking methods that you can leverage in understanding the adoption of Health Technologies. Moreover, visualizations facilitate people to gain insights from their data, so we will cover common visualization approaches used in the personal data contexts.

Jointly offered with CMSC838X. Credit only granted for INST682 or CMSC83 8X.

IM01	Eun Kyoung Choe	Seats (Total: 40)
	Tu 2:00pm - 3:15pm	ONLINE
	Class time/details on ELMs	ONLINE

INST704 **Inclusive Design in HCI**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST631; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST728Z OR INST704. Formerly: INST728Z.

An introduction to inclusive technology design, that is, the design and evaluation of user interfaces for diverse users and use contexts. Building on basic concepts in human-computer interaction, students will learn about design exclusion and barriers to use, and methods by which these can be overcome. Assistive input and output technologies will also be covered. Populations include older adults, users with visual, cognitive or motor impairments, users who are deaf or hard of hearing, children, users in low resource contexts, and users in mobile contexts. Research trends and practical design considerations (e.g., web accessibility requirements) will be covered. Students will interact with the material through readings, discussion, and individual and group assignments.

IM01	Hernisa Kacorri	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST709 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Intensive individual study, reading, or research in an area of specialized interest under faculty supervision. Registration limited to the advanced student with the approval of the advisor and of the faculty member involved.

0301	Brian Butler Contact instructor or department for details.	Seats (Total: 3)
0401	Joel Chan Contact instructor or department for details.	Seats (Total: 5)
0501	Amanda Lazar Contact instructor or department for details.	Seats (Total: 5)
0701	Kenneth Heger Contact instructor or department for details.	Seats (Total: 3)
1201	Renee Hill Contact instructor or department for details.	Seats (Total: 5)
1301	Jennifer Golbeck Contact instructor or department for details.	Seats (Total: 3)
1501	Beth St Jean Contact instructor or department for details.	Seats (Total: 5)
2201	Christopher Antoun Contact instructor or department for details.	Seats (Total: 5)
2301	Bill Kules Contact instructor or department for details.	Seats (Total: 10)
2401	Jessica Vitak Contact instructor or department for details.	Seats (Total: 5)
2601	Niklas Elmqvist Contact instructor or department for details.	Seats (Total: 5)
2801	Eun Kyoung Choe Contact instructor or department for details.	Seats (Total: 5)
3301	Hernisa Kacorri Contact instructor or department for details.	Seats (Total: 5)
3401	Ge Gao Contact instructor or department for details.	Seats (Total: 5)

3801	Elizabeth Bonsignore Contact instructor or department for details.	Seats (Total: 5)
4301	Ursula Gorham-Oscilowski Contact instructor or department for details.	Seats (Total: 5)
4501	Tamara Clegg Contact instructor or department for details.	Seats (Total: 3)
4901	Gregg Vanderheiden Contact instructor or department for details.	Seats (Total: 5)
5536	Naeemul Hassan Contact instructor or department for details.	Seats (Total: 5)

INST710 **User Experience Research Methods**

(Perm req)

Credits: 3 Grading Method: Regular

Students will learn to conduct user research in industry and to provide foundational knowledge needed for academic research. It examines the theoretical and epistemological differences between research paradigms and provides an overview of qualitative, quantitative and mixed-method approaches. It overviews user-centered design (UCD) methods, and uses Contextual Inquiry/Contextual Design as the backbone for a research project, incorporating related formative UCD methods and techniques. It is a project-based course, where students conduct a semester-long project to prepare them for the HCIM Capstone as well as other types of formative user research.

Restriction: Permission of INFO-College of Information Studies.

IM01	Wayne Lutters W 6:00pm - 8:45pm	Seats (Total: 40) ONLINE

INST728T **Special Topics in Information Studies; Introduction to Museum Scholarship**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information studies.

Cross-listed with AMST655, HIST610, INST728T. Credit only granted for: ANTH655, AMST655, HIST610, or INST728T. Provides students a basic understanding of museums as cultural and intellectual institutions. Topics include the historical development of museums, museums as resources for scholarly study, and the museum exhibition as medium for presentation of scholarship.

0101	Diana Marsh Th 2:00pm - 4:45pm	Seats (Total: 20) ONLINE

INST737 **Introduction to Data Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST627; and (LBSC690, LBSC671, or INFM603). Or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

An exploration of some of the best and most general approaches to get the most information out of data through clustering, classification, and regression techniques.

IM01	Vanessa Frias-Martinez Class time/details on ELMs	Seats (Total: 40) ONLINE

INST752 **Location Intelligence**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM600, INFM603, INST630, and INST733; or permission of INFO-College of Information Studies.

Provides a comprehensive overview of the principles of geographic information systems and location analytics for a variety of business scenarios. Explores the processes for integrating location information, maps, and demographic information with business information and implementing analytical applications. Reviews business contexts such as government and citizen analysis, zoning and planning, retail site selection, supply chain management and logistics, fieldservice planning and tracking, real estate, insurance, public safety, municipal maintenance, and others. Provides hands-on opportunities to apply location intelligence methods.

IM01	P Kshetry Class time/details on ELMs	Seats (Total: 40) ONLINE

INST753 **Information Governance and Data Quality**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM600, INFM603, and INST733; or permission of INFO-College of Information Studies.

Surveys the methods and practices for understanding the relationship between organizational performance objectives and their effective oversight, use, and management of information. Examines methods for instituting information governance, data governance, and data quality in the context of information policies for assessing information risk, observing data policies, and enforcing accountability for protection of sensitive information. Explores models of data ownership and accountability, roles and responsibilities for data governance and data stewardship, and processes for soliciting and documenting information and data requirements. Covers techniques for data quality assessment, specification of data quality rules, and applications for validating compliance with data quality expectations, monitoring levels of data quality, and notifications and dashboards for monitoring data compliance.

IM01	Jonathan Adams	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

INST754 **Data Integration and Preparation for Analytics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM600, INFM603, INST630, and INST733; or permission of INFO-College of Information Studies.

Provides a comprehensive overview of the end-to-end processes for acquiring, ingesting, managing, cleansing, transforming and integrating data sources for the purposes of reporting andanalytics. Concepts include data acquisition, data streaming, data staging, standardization, data quality, concept and metadata harmonization, transformation, and data modeling. Students will learn how ingested data sets can be transformed, integrated, and prepared for analytical use.

IM01	David Patrick	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

INST760 **Data Visualization**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST630; or INFM603; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST760 or INST728V. Formerly: INST728V.

Introduction to the science and technology of data visualization--the graphical representation of data to aid understanding--and includes both theoretical foundations as well as practical applications of integrated visualization techniques on real-world problems. Application of these techniques to state-of-the-art problem domains within research, society, and industry.

IM01	Niklas Elmqvist	Seats (Total: 40)
	Tu 2:00pm - 4:45pm	ONLINE

INST775 **HCIM CAPSTONE PREP**

Credits: 3 Grading Method: Regular

Prerequisite: INST631, INST632, and INST717; and must have completed Research Methods; and permission of INFO-College of Information Studies. Or permission of instructor. Restriction: Must be taken in the fall semester of the year in which the student plans to graduate; and permission of INFO-College of Information Studies.

Students will define a project, which requires a high level of background research, rigor in execution and evaluation, and documentation. Capstone projects may follow the design, prototyping and evaluation process from end-to-end or may focus on a subset of elements in that process, such as formative study and design.

IM01	Bill Kules	Seats (Total: 25)
	M 1:00pm - 4:45pm	ONLINE
	Th 6:00pm - 8:45pm	ONLINE

INST782 **Arrangement, Description, and Access for Archives**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST604; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC684, LBSC781, LBSC782, or INST782. Formerly: LBSC684, LBSC781, and LBSC782.

Introduction to the key concepts and practices involved with arrangement and description of archives, and the techniques appropriate to enable users to access archival information in traditional and nontraditional archival contexts.

IM01	Mary Mannix	Seats (Total: 30)
	W 6:00pm - 8:45pm	ONLINE

INST799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

INST800 **The Engaged Intellectual: An Introduction to Research and Academic Work**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies; and restricted to students in Ph.D. in Information Studies (INFS) program.

An introduction to the academic life with a particular focus on what it means to undertake research, teaching, and service.

Restricted to Doctoral Students.

0101	Mega Subramaniam TuTh 8:00am - 9:30am	Seats (Total: 20) ONLINE

INST808 **Seminar in Research Methods and Data Analysis**

Credits: 3 Grading Method: Regular, Audit

Topics and issues in information studies research. Design and conduct of research project.

0101	Jordan Boyd-Graber Class time/details on ELMs	Seats (Total: 20) ONLINE
0102	Amanda Lazar Th 6:00pm - 8:45pm	Seats (Total: 20) ONLINE

INST810 **Individual Research Experience**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Repeatable to 3 credits.

Pre-candidacy individual research experience directed by a faculty member.

Contact department for information to register for this course.

INST878A **Special Topics in Information Studies; Information Ethics**

Credits: 3 Grading Method: Regular, Audit

Seminar topics offered as faculty and student interests warrant. Topic varies.

0101	Ana Ndumu Class time/details on ELMs	Seats (Total: 5) ONLINE

INST878B **Special Topics in Information Studies; Information and Human Rights**

Credits: 3 Grading Method: Regular, Audit

Seminar topics offered as faculty and student interests warrant. Topic varies.

0101	Hannah Bergman	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

INST878C **Special Topics in Information Studies; Diverse Populations, Inclusion, and Information**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Seminar topics offered as faculty and student interests warrant. Topic varies.

0101	Renee Hill	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

INST878E **Special Topics in Information Studies; Achieving Organizational Excellence**

Credits: 3 Grading Method: Regular, Audit

Seminar topics offered as faculty and student interests warrant. Topic varies.

0101	Ryan O'Grady	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

INST888 **Doctoral Seminar**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advanced seminar on selected topics in information studies.

0101	Katie Shilton	Seats (Total: 20)
	M 7:00pm - 8:15pm	ONLINE
	W 12:00pm - 1:15pm	ONLINE

INST898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

INST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ISRL Israel Studies Fall 2020

ISRL249C **Selected Topics in Israel Studies; Contemporary Israel: History and Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Contact department for information to register for this course.

ISRL249D **Selected Topics in Israel Studies; Women in Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Contact department for information to register for this course.

ISRL249E **Selected Topics in Israel Studies; Writing Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Contact department for information to register for this course.

ISRL249N **Zionism and Sexual Revolution**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Cross-listed with: JWST219G. Credit only granted for: ISRL249N or JWST219G.

Cross-listed with JWST219G. Credit granted for ISRL249N or JWST219G. In this course we will look at changes within European Jewish communities that influenced the development of particular fantasies about and representations of gender, love, and sex, and we will examine the ideological import of these ideas within the context of attempts to construct new forms of societies and relationships in Palestine and Israel.

0101	Shirelle Doughty	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

ISRL289I **The Israeli/Palestinian Conflict: Fundamental Questions**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH	General Education: DSHS, SCIS

Why are Palestinians and Israelis unable to resolve their conflict? Will they ever? Using insights and methodologies from a variety of disciplines and contrasting interpretations of history, this course will examine why the Palestinian-Israeli conflict continues, why it has become so central in world politics and how it connects with other global issues.

0101	Paul Scham	Seats (Total: 60)
	TuTh 11:00am - 12:15pm	ONLINE

ISRL329B **Special Topics in Israel Studies; TV Genres in Context: Israeli Serials and American TV**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Cross-listed with FILM359B. Credit granted for FILM359B or ISRL329B. Over the past decade, the prominence of Israeli television series has skyrocketed, both within Israel and internationally. In the U.S., Israeli tv shows have become some of the most popular on Netflix (Fauda, Shtisel), HBO (Our Boys, In Treatment), Hulu (Prisoners of War, the basis of Showtime s Homeland), and even ABC, which recently adapted the Israeli show Beauty and the Baker and retitled it wait for it! The Baker and the Beauty. This course will examine through critical analysis recent Israeli television fiction series and ask two related, fundamental questions: 1) what do these shows reflect and teach us about current Israeli culture, society, and politics; and 2) what makes these shows so adaptable and popular outside the country, especially in America.

0101	Eric Zakim	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

ISRL329G **The Israeli Settler Movement: The Road to One State?**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHS

Cross-listed with: HIST329G, JWST319N. Credit only granted for: HIST329G, ISRL329G or JWST319N.

An exploration of the Israeli settler movement in the West Bank and its rise to prominence in Israeli politics in the last two decades. We will also examine how the success of the settlers influences the prospects of a two-state solution for the Israeli-Palestinian conflict, as well as the merit of claims that Israel-Palestine is already under a "one-state" reality.

0101	Shay Hazkani	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

ISRL329N **Special Topics in Israel Studies; The United States and Israel: Likely or Unlikely Allies?**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Cross-listed with GVPT368B. Credit only granted for ISRL329N or GVPT368B. An examination of the U.S. - Israel relationship through historical and thematic lenses. Stretching from the pre-state era through the post-Cold War alliance and the intensive U. S. role mediating Arab-Israeli peace, which covers nearly a century of U. S. foreign policy. It will include domestic sources that have shaped U. S. policy, including public opinion, and conclude by examining scenarios for increased cooperation and managing tension in the relationship.

0101	Scott Lasensky	Seats (Total: 35)
	W 4:00pm - 6:30pm	ONLINE

ISRL343 **Global Migration and the Israeli Case Study**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP

Cross-listed with: SOCY398G. Credit only granted for: ISRL349K, GVPT368G, SOCY398G, SOCY398I, or ISRL343. Formerly: ISRL349K.

Over 70% of Israel's population is made of first, second or third generation immigrants, who came from over 70 countries, making Israel an ultimate immigrant society. This course will focus on the history of Israel as a case study for the understanding of the historical phenomena of modern immigration.

0101	Elia Etkin	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

ISRL349A **Investigating Topics in Israel Studies; The Psychology of Conflict Resolution**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Contact department for information to register for this course.

ISRL349B **Investigating Topics in Israel Studies; Arab-Israeli Relations**

Credits: 3-6

Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Contact department for information to register for this course.

ISRL369C **Special Topics in Study Abroad; Israeli Society in Israeli Cinema**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ISRL448M **Seminar in Israel Studies; War and Peace in Israeli Discourse 1967-2020**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Intensive study of an Israel Studies topic. Expected work product is a substantial research or analysis paper or appropriate equivalent.

Cross-listed with COMM498M. Credit only granted for ISRL448M or COMM498M. This course examines two oppositional discourses in Israel: 1) war discourse, which utilizes various discursive strategies, such as metaphors, lexical choices, and euphemisms, to routinize war; 2) peace discourse, which utilizes conciliatory speech acts, equivocation in diplomatic discourse, recognition discourses, and separation and engagement discourses. We will explore how war and peace discourses impact social consciousnessin Israel.

0101	Elie Friedman	Seats (Total: 45)
	Class time/details on ELMs	ONLINE

ITAL Italian Fall 2020

ITAL103 **Intensive Elementary Italian**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Not open to fluent/native speakers of Italian. Credit only granted for: ITAL103 or ITAL121.

Covers speaking, reading, writing, listening, and culture of Italian-speaking world.

0201	Stefania Amodeo TuTh 11:00am - 12:15pm W 11:00am - 11:50am	Seats (Total: 15) ONLINE ONLINE
0301	Joseph Falvo MW 2:00pm - 3:15pm F 2:00pm - 2:50pm	Seats (Total: 15) ONLINE ONLINE

ITAL121 **Accelerated Italian I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: ITAL103 or ITAL121.

An intensive beginning course in Italian language skills: guided practice in reading, writing, understanding and conversation, to enable the student to move more quickly to advanced courses. Restricted to students already having a good background in at least one other foreign language. When taken with ITAL122, may be used to satisfy language requirement.

Jointly offered with ITAL 121H.

Contact department for information to register for this course.

ITAL121H **Accelerated Italian I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: ITAL103 or ITAL121.

An intensive beginning course in Italian language skills: guided practice in reading, writing, understanding and conversation, to enable the student to move more quickly to advanced courses. Restricted to students already having a good background in at least one other foreign language. When taken with ITAL122, may be used to satisfy language requirement.

For general honors students only. Jointly offered with ITAL 121.

Contact department for information to register for this course.

ITAL122 **Accelerated Italian II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: ITAL121; or must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: ITAL203 or ITAL122.

Continuation of ITAL121. Completion of accelerated cycle. May be used to satisfyARHU Global Engagement requirement.

Contact department for information to register for this course.

ITAL169C **Special Topics in Study Abroad I; Italian Conversation**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL169E **Special Topics in Study Abroad I; Elementary Italian I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL169R **Special Topics in Study Abroad I; Introduction to Italian Language and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL203 **Intensive Intermediate Italian**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: ITAL103; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed ITAL122; and must not be a fluent/native speaker of Italian. Credit only granted for: ITAL203 or ITAL122.

Covers speaking, reading, writing, listening, and culture of Italian-speaking world.

0101	Mirella Vaglio	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE
	W 2:00pm - 2:50pm	ONLINE

ITAL204 **Review Grammar and Composition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: ITAL203 or ITAL122; or must have appropriate Foreign Language Placement Test (FLPT) score.

An intensive review of major aspects of contemporary grammatical usage; training in comprehension; an introduction to guided composition.

Contact department for information to register for this course.

ITAL207 **Reading and Writing in Italian**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: ITAL204; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a fluent/native speaker of Italian.

Culture-based, process approach to reading and writing in Italian; selected grammatical topics.

Contact department for information to register for this course.

ITAL211 **Intermediate Conversation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: ITAL203; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Italian.

Practice in spoken Italian based on reading and listening exercises in a variety of genres. Written assignments and exams.

Contact department for information to register for this course.

ITAL261 **Cuisine, Culture, and Society in Italy Yesterday and Today**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: ITAL204; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Exposes students to an important aspect of Italian culture: the art of gastronomy. Provides an in-depth understanding of the close relationship between food and culture, while enriching their knowledge of the Italian language through reading and analysis of various texts which deal with the preparation and adaptation of Italian food in different cultural settings. Taught in Italian.

0101	Stefania Amodeo	Seats (Total: 20)
	MWF 1:00pm - 1:50pm	ONLINE

ITAL269I **Special Topics in Study Abroad II; Intensive Intermediate Italian I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL269R **Special Topics in Study Abroad II; Elementary Italian I**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL301 **Italian Composition**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ITAL207; or students who have taken courses with comparable content may contact the department.

Techniques of composition; grammatical analysis; various genres; vocabulary.

Contact department for information to register for this course.

ITAL306 **Commercial Italian I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ITAL301; or permission of ARHU-School of Languages, Literatures, and Cultures department.

An introduction to Italian Business language and culture. Special emphasis on communicative strategies used in business transactions and applications. Reading and discussion of relevant articles relating to business world from on-line newspapers and magazines.

Contact department for information to register for this course.

ITAL311 **Advanced Oral Expression: Current Events**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ITAL211; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Oral expression; development of idiomatic forms and vocabulary to level of the Italian press.

0101	Stefania Amodeo	Seats (Total: 20)
	MWF 10:00am - 10:50am	ONLINE

ITAL369W **Special Topics in Study Abroad III; Composition and Style**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

ITAL399 **Directed Study in Italian**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Intended for undergraduates who wish to work on an individual basis with a professor of their choice.

Contact department for information to register for this course.

ITAL399T **Directed Study in Italian; Italian Tutoring**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Intended for undergraduates who wish to work on an individual basis with a professor of their choice.

Contact department for information to register for this course.

ITAL411 **Monsters and Demons: the Faces of Evil in Dante's Inferno**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

An interdisciplinary study of Dante's Inferno as represented in the Divine Comedy. Special emphasis on Dante's own portrayal of monsters and demons and their roles in the poet's eschatological vision of Hell.Taught in English

0101	Joseph Falvo MWF 1:00pm - 1:50pm	Seats (Total: 25) ONLINE

ITAL431 **Italian Civilization in Translation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ITAL431 or ITAL432.

Political, social, intellectual, literary and artistic forces shaping contemporary Italy from the late Middle Ages to the present. Taught in English.

Contact department for information to register for this course.

ITAL471 **Italian Cinema: A Cultural Approach in Translation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ITAL471 or ITAL472.

The culture of Italy through the medium of film from the silent days up to the present. Taught in English.

Contact department for information to register for this course.

ITAL478D **Colloquium in Italian; Monsters and Demons: the Faces of Evil in Dante's Inferno**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Colloquium section taught in Italian to accompany 400-level Italian courses taught in English. Discussion, presentations, readings.

0101	Joseph Falvo W 11:00am - 11:50am	Seats (Total: 5) ONLINE

ITAL478M **Colloquium in Italian; The Mafia: From Corleone to Hollywood**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Colloquium section taught in Italian to accompany 400-level Italian courses taught in English. Discussion, presentations, readings.

0101	Mauro Resmini Class time/details on ELMs	Seats (Total: 5) ONLINE

ITAL499 **Special Topics in Italian Studies**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ITAL499M **Special Topics in Italian Studies; The Mafia: From Corleone to Hollywood**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Crosslisted with FILM329R. Credit only granted for ITAL499M or FILM329R.

0101	Mauro Resmini	Seats (Total: 25)
	MW 3:30pm - 4:45pm	ONLINE

ITAL499T **Special Topics in Italian Studies; Italian Cities: History through Urban Form**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ITAL499V **Special Topics in Italian Studies; Italian Comedy on Stage and Screen**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

JAPN Japanese Fall 2020

JAPN101 **Elementary Japanese I**

Credits: 6 Grading Method: Regular

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score.

Introduction to basic patterns of contemporary spoken Japanese and to the two phonetic syllabaries (Katakana and Hiragana).

This course has been put on a timed release system. Seats will be opened gradually by the registrar's office, to a total of 15 seats per section.

0101	Makiko Inoue, Takehiro Iizuka, Kumiko Akikawa	Seats (Total: 15)
	MWF 10:00am - 10:50am	ONLINE
	TuTh 9:30am - 10:45am	ONLINE

0201	Kumiko Akikawa, Makiko Inoue, Takehiro Iizuka MWF 11:00am - 11:50am TuTh 11:00am - 12:15pm	Seats (Total: 15) ONLINE ONLINE
0301	Makiko Inoue, Takehiro Iizuka, Kumiko Akikawa MWF 2:00pm - 2:50pm TuTh 2:00pm - 3:15pm	Seats (Total: 15) ONLINE ONLINE

JAPN201 **Intermediate Japanese I**

Credits: 6 Grading Method: Regular CORE: HO

Prerequisite: Minimum grade of C- in JAPN102; or or appropriate Foreign Language Placement Test (FLPT) score.

Contemporary spoken and written Japanese.

0101	Etsuko Yamakita MWF 11:00am - 12:50pm	Seats (Total: 15) ONLINE
0201	Etsuko Yamakita MWF 1:00pm - 2:50pm	Seats (Total: 15) ONLINE

JAPN301 **Advanced Japanese I**

Credits: 6 Grading Method: Regular

Prerequisite: Minimum grade of C- in JAPN202; or permission of instructor.

Advanced conversation, oral comprehension, and selected readings.

0101	Kumiko Akikawa MWF 10:00am - 11:50am	Seats (Total: 15) ONLINE
0201	Kumiko Akikawa MWF 12:00pm - 1:50pm	Seats (Total: 15) ONLINE

JAPN311 **Traditional Japanese Language and Culture**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in JAPN202; or permission of instructor.

Introduction to classical Japanese language (kobun) through representative texts and genres from the literary traditions of the Heian period (794-1185) to the Early Modern period (1600-1868). Taught in Japanese and English.

0101	Jyana Browne	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	ONLINE

JAPN386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

JAPN407 **The Art of Translation**

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (JAPN401, JAPN402); or students who have taken courses with comparable content may contact the department.

Theory and practice of translation. Variety of genres. Japanese to English.

0101	Michele Mason	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	ONLINE

JAPN421 **History of the Japanese Language**

Credits: 3 Grading Method: Regular

Prerequisite: JAPN102; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Investigation of the origin of the Japanese language, its relationship with other languages, and its development. Taught in English, but presumes knowledge of Kanji (Chinese characters).

0101	Samuel Ramsey	Seats (Total: 20)
	MW 3:30pm - 4:45pm	ONLINE

JAPN498A **Special Topics in Japanese Studies; Troubling Gender and Sex in Japan**

Credits: 3 Grading Method: Regular

Special topics in Japanese studies. Taught in English.

Credit only granted for JAPN335 or JAPN498A There are a number of overly stereotypical gendered and sexualized images of Japanese in the United States. Consider, for instance, the continued dominance of the icons of Japan, the Samurai and Geisha. An examination of the wide variety of representations of femininity and masculinity and gender and sexual identities in Japan, however, offers us a fruitful opportunity to expand and challenge even our most inclusive ideas of gender and sexuality. The title of this course derives from a feminist, theoretical work by Judith Butler, Gender Trouble. Putting a critical lens to fiction, film, drama, art, and legal documents, we will trouble (complicate and deconstruct) received notions of gender and sexuality in a number of fundamental ways. Taught in English. All Japanese texts in translation.

0101	Michele Mason	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

JAPN498B **Special Topics in Japanese Studies; The Supernatural and the Strange in Classical Japan**

Credits: 3 Grading Method: Regular

Special topics in Japanese studies. Taught in English.

This course investigates supernatural and strange occurrences in novels, plays, folk tales, and ghost stories from the Heian, Medieval, and Edo periods. Through close reading of literary and poetic texts, picture scrolls, and performances, we will explore how the presence of eerie and otherworldly tropes provided a means to make sense of the natural, spiritual, and socio-political worlds in premodern Japan. Taught in English.

0101	Jyana Browne	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

JAPN499 **Directed Study in Japanese**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Contact department for information to register for this course.

JOUR Journalism Fall 2020

JOUR130 **Self-Presentation in the Age of YouTube**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285. Additional information: May not count toward the Journalism major.

Students, as they make use of evolving technologies, need to be able to present themselves effectively in front of any number of different audiences through any number of different outlets. Whether in an interview on radio, a guest presentation at a conference, in comments on a video blog, in commentary on TV, in the lead on a self-produced YouTube video, or as spokesperson in front of investors or management, professionals need strong oral communication skills. This class focuses on strengthening those skills through active individual and group presentations, as well as, through discussion of key techniques and group critique of presentation publicly available in the social media space on sites such as YouTube.

0101	Amber Moore MW 11:00am - 12:15pm	Seats (Total: 22) ONLINE
0201	George Lanum TuTh 12:30pm - 1:45pm	Seats (Total: 22) ONLINE
FC01	Kelly Stepno MW 4:30pm - 5:45pm Class time/details on ELMs *Restricted to students in Freshmen Connection. Alternating face-to-face/online class meeting. Please see instructor fordetails.*	Seats (Total: 21) KNI 1208 ONLINE
FC03	Hamil Harris TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 21) ONLINE
FC04	Kelly Stepno MW 7:30pm - 8:45pm Class time/details on ELMs *Restricted to students in Freshmen Connection. Alternating face-to-face/online class meeting. Please see instructor for details.*	Seats (Total: 21) KNI 1208 ONLINE
FC05	Hamil Harris TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 21) ONLINE

JOUR150 **Introduction to Mass Communication**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB	General Education: DSHS, DSSP

Additional information: Not applicable toward journalism major.

Survey of the functions and effects of the mass media in the United States. A consumer's introduction to newspapers, television, radio, film, sound recording, books, magazines, and new media technology.

0101	Sohana Nasrin TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE
0201	Edward Alwood TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE
0301	Edward Alwood TuTh 12:30pm - 1:45pm	Seats (Total: 35) ONLINE
0401	Denitsa Yotova Class time/details on ELMs	Seats (Total: 35) ONLINE
0501	Hazel Feigenblatt TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE
0601	Carolina Siqueira Paranhos Velloso MW 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

JOUR152 **Introduction to Storytelling with Code**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR200.

An introduction to the ways markup and programming languages and computational thinking are transforming news reporting and storytelling.

Attendance is required on the first day of class and last day of class. Restricted to students with the 0601G major code. All other students will need to be placed on a holdfile.

0201	Naeemul Hassan **Meets October 19, 2020 - December 14, 2020** F 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 70) ONLINE ONLINE

JOUR175 **Media Literacy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: IE, D General Education: DSSP, DVUP

Additional information: Not applicable toward journalism major.

An analysis of the information, values and underlying messages conveyed via television, newspapers, the internet, magazines, radio and film. Examines the accuracy of those messages and explores how media shape views of politics, culture and society.

0101	Susan Moeller Class time/details on ELMs *Mandatory synchronous online meetings 6-7pm on 9/1, 9/29, 10/27, 12/1.*	Seats (Total: 80) ONLINE
0103	Susan Moeller Class time/details on ELMs *Mandatory synchronous online meetings 6-7pm on 9/1, 9/29, 10/27, 12/1.*	Seats (Total: 80) ONLINE

JOUR181 **Grammar for Journalists**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ENGL181, ENGL281, or JOUR181.

The basic grammatical structures of standard American written English and its conventions of punctuation, diction and usage in journalistic writing.

0101	Linda Coleman W 3:00pm - 3:50pm	Seats (Total: 170) ONLINE
0201	Linda Coleman W 11:00am - 11:50am	Seats (Total: 70) ONLINE
FC01	Justin Thompson Tu 3:00pm - 3:50pm *Restricted to students in Freshman Connection.*	Seats (Total: 20) ONLINE

JOUR199 **Survey Apprenticeship**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

College-monitored experience in approved mass-communications organizations and industries.

0101	Adrianne Flynn Class time/details on ELMs	Seats (Total: 40) ONLINE

JOUR200 **Journalism History, Roles and Structures**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduction to the study of journalism from the standpoint of media history and sociology.

0101	Merrilee Cox MW 9:30am - 10:45am *Restricted to journalism majors only.*	Seats (Total: 30) ONLINE
0301	Ira Chinoy TuTh 11:00am - 12:15pm *Restricted to journalism majors only.*	Seats (Total: 30) ONLINE
0401	Carole Lee MW 12:30pm - 1:45pm *Open to prospective journalism majors.*	Seats (Total: 30) ONLINE
0501	Ira Chinoy TuTh 9:30am - 10:45am *Restricted to journalism majors only.*	Seats (Total: 30) ONLINE
0601	Bobbie Foster TuTh 12:30pm - 1:45pm *Open to prospective journalism majors.*	Seats (Total: 30) ONLINE
FC01	Carole Lee MW 4:30pm - 5:45pm *Restricted to students in Freshman Connection.*	Seats (Total: 32) ONLINE

JOUR201 **News Writing and Reporting I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENGL101, JOUR181, and JOUR200; and permission of JOUR-Philip Merrill College of Journalism. Restriction: For students intending to be journalism majors; and permission of JOUR-Philip Merrill College of Journalism.

Introduction to news for the print and electronic media, development of new concepts: laboratory in news-gathering tools and writing skills. Students who earned 80% or higher on the JOUR181 diagnostic are exempt from the JOUR181 prerequisite.

0201	Joseph Weber MW 7:00pm - 8:50pm	Seats (Total: 18) ONLINE
0301	Merrilee Cox MW 2:00pm - 3:50pm	Seats (Total: 18) ONLINE

JOUR202 **News Editing**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Copy editing, fact checking, verification and research across media platforms, including social, with consideration of story play and placement, graphic principles, headlines and SEO.

0101	Barbara Barrett TuTh 4:00pm - 5:50pm	Seats (Total: 18) ONLINE
0201	Lisa Lednicer TuTh 2:00pm - 3:50pm	Seats (Total: 18) ONLINE

JOUR262 **News Videography**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR201. Jointly offered with: JOUR603. Credit only granted for: JOUR262 or JOUR603.

Introduction to shooting, editing and production of video stories for broadcast and the Web; includes newsgathering in the field.

0201	Luke Rollins TuTh 7:00pm - 8:50pm	Seats (Total: 12) KNI 3210
0301	Alanna Delfino M 7:00pm - 8:50pm W 7:00pm - 8:50pm	Seats (Total: 12) KNI 3210 ONLINE
0501	Bethany Swain MW 2:00pm - 3:50pm Class time/details on ELMs *Alternating face-to-face/online class meeting. See instructor for details.*	Seats (Total: 12) KNI 1200 ONLINE

JOUR289E **Media Law and Ethics in the Digital Age**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHS, SCIS

Credit only granted for: JOUR289E or JOUR281. Formerly: JOUR289E. Additional information: This course is intended for non-journalism majors.

Explores the First Amendment, libel, privacy, FOIA and copyright as they have evolved in the digital news age of bloggers, tweeters and citizen journalists. The course will cover fundamental legal and ethical concepts as well as practical application.

This course is intended for non-journalism majors. Explore the First Amendment, libel, privacy, FOIA and copyright as they have evolved in the digital news age of bloggers, tweeters and citizen journalists. The course will cover fundamental legal and ethical concepts as well as practical application.

0101	Deborah Nelson Class time/details on ELMs	Seats (Total: 70) ONLINE

JOUR289F **Beyond Facebook: How Social Media are Transforming Society, Culture, Business and Politics**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: IE	General Education: DSHU, SCIS

Credit only granted for: JOUR289F or JOUR282. Formerly: JOUR289F.

Examining the rise of social media and their impact on culture, business, government, politics, journalism and society, this course provides students with a broad contextual understanding of the multidisciplinary impacts of social media such as Twitter, Facebook and similar Internet-based services.

Examining the rise of social media and their impact on culture, business, government, politics, journalism and society, this course provides students with a broad contextual understanding of the multidisciplinary impacts of social media such as Twitter, Facebook and similar Internet-based services.

0101	Robin Sundaramoorthy MW 11:00am - 12:15pm	Seats (Total: 35) ONLINE
0201	Sarah Oates Class time/details on ELMs	Seats (Total: 70) ONLINE

JOUR289J **Probing War: Investigative Narratives and American Conflicts**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU, SCIS

Credit only granted for: JOUR283 or JOUR289J. Formerly: JOUR289J.

Students will explore the realities of war through the work of journalists who pushed beyond the daily headlines, some risking life and limb, to challenge official versions and document uncomfortable realities about American conflicts.

In this course, we will explore the realities of war through the work of journalists who pushed beyond the daily headlines, some risking life and limb, to challenge official versions and document uncomfortable realities about American conflicts.

0101	Christopher Hanson	Seats (Total: 30)
	MW 11:00am - 12:15pm	ONLINE

JOUR289P **Scandal: Exposing Corruption, Justice, and Vice in America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Credit only granted for: JOUR289P, JOUR284 or HONR239J. Formerly: JOUR289P, HONR239J.

Students will examine the nature and meaning of scandals in society: how they are uncovered and constructed; why some forms of wrongdoing are considered scandalous but not others; how this definition has changed over time; and how scandals resonate in ways that reflect societal norms.

Credit will only be granted for JOUR289P or HONR239J. Students will examine the nature and meaning of scandals in society: how they are uncovered and constructed; why some forms of wrongdoing are considered scandalous but not others; how this definition has changed over time; and how scandals resonate in ways that reflect societal norms

0101	Mark Feldstein	Seats (Total: 60)
	W 2:00pm - 4:45pm	ONLINE

JOUR320 **News Writing and Reporting II: Multiplatform**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR152; and minimum grade of C- in JOUR201; and must have completed or be concurrently enrolled in JOUR262 or JOUR370. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Principles and practices of news reporting; covering news beats and other news sources, including researching news stories for accuracy, comprehensiveness and interpretation. Due to rigorous publication requirement, plan your schedule accordingly.

0101	Jerry Zremski	Seats (Total: 18)
	TuTh 6:00pm - 7:50pm	ONLINE

0201	David Lightman TuTh 8:00am - 9:50am	Seats (Total: 18) ONLINE
0401	Abbie Bennett MW 7:00pm - 8:50pm	Seats (Total: 18) ONLINE
0501	John Hughes TuTh 5:45pm - 7:35pm	Seats (Total: 18) ONLINE
0601	Clarence Williams TuTh 11:30am - 1:20pm	Seats (Total: 18) ONLINE

JOUR325 **Capital News Service Bureau**

(Perm req)

Credits: 9 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: JOUR320; and permission of JOUR-Philip Merrill College of Journalism.

Advanced journalism training. Students report as part of college's Capital News Service program.

Jointly offered with JOUR625. Students must contact the instructor for permission to register.

0101	James Carroll Class time/details on ELMs *This section meets in the National Press Building, Washington, DC.*	Seats (Total: 9) ONLINE	
0201	Karen Denny Class time/details on ELMs *This section meets in the CNS Bureau, Annapolis, MD.*	Seats (Total: 9) ONLINE	
0301	Adam Marton Class time/details on ELMs *This section meets in the CNS Bureau, College Park, MD.*	Seats (Total: 9) ONLINE	Lab
0401	Alexander Pyles Class time/details on ELMs *This section meets in the CNS Bureau, College Park, MD.*	Seats (Total: 9) ONLINE	

JOUR327 **Urban Affairs Reporting**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSSP

Prerequisite: JOUR320; and permission of instructor. Jointly offered with JOUR627. Credit only granted for: JOUR327 or JOUR627.

Students are immersed in coverage of issues affecting cities, working on a semester-long multi-platform reporting project based in Baltimore.

Students will use Baltimore as a working laboratory to report on urban issues. Course meets in Baltimore.

0101	Sandra Banisky M 1:45pm - 4:30pm	Seats (Total: 7) Location: TBA

JOUR328R **Special Topics in News Writing and Reporting; Business and Economic Reporting**

(Perm req)

Credits: 3

Grading Method: Regular

Advanced training and practice in writing and reporting news.

Prerequisite: JOUR320. Students will explore why economic and business themes are among the top stories generating reader interest. Topics vary each semester but can focus on the economic impact of immigration, employment, income inequality, wage stagnation, trade wars and affordable housing. Students will learn to identify newsworthy stories and interpret and integrate numbers and financial data into stories in acompelling way.

0101	Constance Ford W 10:00am - 12:45pm	Seats (Total: 8) ONLINE

JOUR328V **Special Topics in News Writing and Reporting; Covering Comic Book Culture in Entertainment**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced training and practice in writing and reporting news.

Prerequisite: JOUR320. Comic book culture's evolving impact in entertainment has been vast and rapidly growing. This course will look at the humble beginnings of comic book culture in entertainment, from the comic books themselves, to the adaptations that have become big business for movies, television, streaming and animation as well as how to write on/cover those moments.

0101	David Betancourt Tu 6:00pm - 8:45pm	Seats (Total: 14) ONLINE

JOUR352 **Interactive Design and Development**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR152; and JOUR201; and must have completed or be concurrently enrolled in JOUR262 or JOUR370. Or permission of JOUR-Philip Merrill College of Journalism. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Jointly offered with JOUR652. Credit only granted for: JOUR352 or JOUR652.

Conceptualize, wireframe, design and build responsive Web pages using HTML, style sheets and other coding tools; work with open source interactive tools, JavaScript libraries, multimedia and text to create charts, timelines, maps and other forms of nonfiction storytelling.

0101	Adam Marton W 2:00pm - 4:45pm	Seats (Total: 3) ONLINE
0201	Alexander Pyles Th 2:00pm - 4:45pm	Seats (Total: 18) ONLINE
0301	Kalani Gordon Th 6:30pm - 9:15pm	Seats (Total: 18) ONLINE
0401	Emma Harris M 11:00am - 1:45pm	Seats (Total: 18) ONLINE
0501	Gagan Nirula Th 7:00pm - 9:45pm Class time/details on ELMs *Alternating face-to-face/online class meeting. Please see instructor fo details.*	Seats (Total: 20) KNI 3202 ONLINE

JOUR353 **News Bureau: Multimedia Reporting**

(Perm req)

Credits: 6

Grading Method: Regular, Audit

General Education: DSSP

Prerequisite: JOUR352; and permission of JOUR-Philip Merrill College of Journalism; and (JOUR320 or JOUR360).

Advanced reporting and writing in an online environment focusing on multimedia, non-traditional storytelling and investigative reporting.

0201	Karen Denny Contact instructor or department for details. *This section is for students in the Annapolis bureau.*	Seats (Total: 7)

0301	James Carroll	Seats (Total: 7)
	Contact instructor or department for details.	
	This section is for students in the Washington, D.C. bureau.	
0401	Deborah Nelson	Seats (Total: 7)
	Contact instructor or department for details.	
	This section is for students in the Investigative Reporting bureau.	

JOUR355 **News Bureau: Multimedia Editing and Production**

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: JOUR320 or JOUR360; and JOUR352; and permission of JOUR-Philip Merrill College of Journalism.

Advanced online journalism training. Students work as multimedia and social media editors and producers, building interactive content and special reports.

0101	Adam Marton	Seats (Total: 10)
	Contact instructor or department for details.	
0201	Alexander Pyles	Seats (Total: 10)
	Contact instructor or department for details.	

JOUR357 **Capital News Service Broadcast Immersion**

(Perm req)

Credits: 6 Grading Method: Regular, Audit

Prerequisite: JOUR361; and permission of JOUR-Philip Merrill College of Journalism.

Advanced broadcast journalism training. Students report as part of the College's Capital News Service program.

0101	Mel Coffee	Seats (Total: 6)
	Contact instructor or department for details.	

JOUR360 **News Writing and Reporting II: Broadcast**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Writing and reporting for broadcast media: production of news stories.

0101	Janet Terry TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 18) KNI 1200 ONLINE
	Alternating face-to-face/online class meeting. Please see instructor fo details.	
0201	Mark Feldstein MW 10:30am - 11:45am	Seats (Total: 6) ONLINE
0301	Stuart Schwartz MW 1:00pm - 2:15pm	Seats (Total: 18) ONLINE
0401	Elizabeth Feldman TuTh 11:30am - 12:45pm	Seats (Total: 18) ONLINE

JOUR361 **Television Reporting and Production**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR262 and JOUR360.

Writing and editing for the broadcast media. Interpretive and documentary news stories.

Due to rigorous fieldwork requirement, plan your schedule accordingly.

0301	Joshua Davidsburg MW 10:00am - 11:50am	Seats (Total: 7) ONLINE
	This section will focus on documentary filmmaking. It will not cover traditional TV reporting and does not count as a prerequisite for the CNS broadcast bureau.	
0401	Adam Longo M 12:00pm - 1:50pm W 12:00pm - 1:50pm	Seats (Total: 12) KNI 1200 ONLINE

JOUR362 **Broadcast News Producing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR262 and JOUR360; and must have completed or be concurrently enrolled in JOUR361.

Producing TV news.

0102	Cindy Wright	Seats (Total: 2)	
	Tu 7:15pm - 9:15pm	TWS 0117	
	Tu 2:00pm - 6:50pm	TWS 0117	Lab
0104	Cindy Wright	Seats (Total: 2)	
	Tu 7:15pm - 9:15pm	TWS 0117	
	Th 2:00pm - 6:50pm	TWS 0117	Lab

JOUR364 **Radio Broadcasting**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR 334. Jointly offered with: JOUR664.

Students will receive professional skills training in the reporting, writing, editing, voicing and production of radio news. Students will be required to do extensive field reporting, along with writing and mixing radio pieces. They will also participate in other aspects of radio news production, including editing, directing, live interviewing and hosting. By the end of the semester, students will have created all the elements of a complete radio broadcast. The class will also delve into the history and evolution of radio news and its future in podcasting and other forms.

0101	Robert Little	Seats (Total: 5)
	W 5:30pm - 8:15pm	KNI 3210
	Class time/details on ELMs	ONLINE
	Alternating face-to-face/online class meeting. Please see instructor fo details.	

JOUR367 **Broadcast News Bureau**

(Perm req)

Credits: 9 Grading Method: Regular, Audit General Education: DSSP

Prerequisite: JOUR361; and permission of JOUR-Philip Merrill College of Journalism.

Advanced broadcast journalism training. Students report as part of the college's Capital News Service program.

Jointly offered with JOUR667.

0101	Mel Coffee	Seats (Total: 15)
	Contact instructor or department for details.	

JOUR368D **Topics in Broadcast and Electronic Media; Social Media Content Creation, Audience Engagement and Analytics**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR320/JOUR360. This class will provide students with an overview of social media best practices for journalists, and will work to develop their skills in the following areas: social content creation, audience engagement, sourcing and verification and analytics. By the end of this course, students will have the practical skills needed to manage a social media account for themselves (as student or professional journalists) or contribute to the management of a news organization's social media presence.

0101	Alexander Pyles	Seats (Total: 13)
	Th 12:30pm - 1:45pm	ONLINE
	Class time/details on ELMs	ONLINE

JOUR368I **Topics in Broadcast and Electronic Media; Designing Stories with Motion Graphics**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR203 or JOUR262 or JOUR370. In this course, students will learn how to create motion graphics that turn data and facts into visually compelling animated stories. Students will learn theories and practices of animation, design and visual journalism. After completing this course, students will have a solid grasp of storyboarding, scripting and creating motion graphic stories using the Adobe After Effects software.

0101	Krishnan Vasudevan	Seats (Total: 17)
	MW 12:30pm - 1:45pm	ONLINE

JOUR368K **Topics in Broadcast and Electronic Media; Video Innovation**

(Perm req)

Credits: 3

Grading Method: Regular

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR361 and permission of the instructor (jdavidsb@umd.edu). Students will explore the intersection between social media, video and a live broadcast by creating new and innovative ways to "broadcast" news to an audience. The class will encourage an entrepreneurial spirit and give students the opportunity to produce a show from scratch, with content aired on UMTV and online. In addition to creating television, students will support the broadcast arm of Capital News Service by managing volunteers, filling in on the studio staff and producing special projects and graphics when necessary.

0101	Joshua Davidsburg M 2:00pm - 4:45pm	Seats (Total: 10) KNI 3202

JOUR368L **Topics in Broadcast and Electronic Media; Audio and Podcast Reporting**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR360. Students will learn the tools needed to report and produce short and long-form audio storytelling, including writing, reporting, interviewing, production, editing, hosting and delivery. Field reporting and audio gathering outside of class is required, along with writing and mixing broadcast-quality audio stories. Together the class will produce a complete radio broadcast on deadline from newscaststo live interviews to mixed radio pieces. Various interests in audio reporting welcome and encouraged.

0101	Jennifer Beemsterboer Tu 5:30pm - 8:15pm	Seats (Total: 8) ONLINE

JOUR368N **Topics in Broadcast and Electronic Media; Advanced Photojournalism**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR370. This course will provide a deeper dive into the storytelling medium of photojournalism. Students will learn the skills necessary to tell in-depth, long-term stories through the use of still photography. Topics of discussion will include the history of photojournalism, changing approaches to the photo story/photo essay overtime, how to approach a variety of potential subject matter and situations, finding long-term photo story projects and organizing images for a variety of digital and traditional formats.

0101	Timothy Jacobsen F 9:00am - 11:45am	Seats (Total: 14) KNI 1208

JOUR368Y **Topics in Broadcast and Electronic Media; Sports Producing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR262 and JOUR360; or JOUR320. This class will take an analytical look at sports TV and sports content by deconstructing shows. We will examine the producer's role in creating the look, feel and direction of shows and learn how to choose a lead story, how to "tease" effectively and the importance of identifying and telling good stories. We will watch live televised sporting events to better understand the techniques used by directors and producers. Students will get hands-on experience with BTN2GO and learn all aspects of live game production.

0101	Joseph Yasharoff W 7:00pm - 9:45pm	Seats (Total: 12) ONLINE

JOUR370 **Photojournalism**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR201. Restriction: Permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR 368P, JOUR 370 or JOUR 670. Formerly: JOUR 368P. Additional information: Students are required to borrow, rent or purchase a 35mm digital camera. Contact department for camera specifications.

Examining the basics of shooting, editing and storytelling with still photos taken with 35mm digital cameras. Students shoot portraits, feature photos and action shots. Final project is a photo story/essay.

0101	Timothy Jacobsen F 12:00pm - 2:45pm	Seats (Total: 14) KNI 1208
0301	Timothy Jacobsen W 4:00pm - 6:45pm	Seats (Total: 14) KNI 1200
0501	Jaclyn Borowski M 5:00pm - 7:45pm Class time/details on ELMs *Alternating face-to-face/online class meeting. Please see instructor fo details.*	Seats (Total: 14) KNI 1200 ONLINE
0701	Sora Devore Tu 7:00pm - 9:45pm Class time/details on ELMs *Alternating face-to-face/online class meeting. Please see instructor fo details.*	Seats (Total: 14) KNI 1200 ONLINE

JOUR371 **Feature Writing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR320.

Research and writing feature articles.

0101	DeNeen Brown	Seats (Total: 16)
	M 2:00pm - 4:45pm	ONLINE

JOUR382 **Sports Writing and Reporting**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR320; and permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR328B or JOUR382. Formerly: JOUR328B.

Gives students full and wide-ranging instruction in all aspects of sports reporting and writing, including how to report, write, edit and lay out sports stories, incorporating photography and multimedia. We will also discuss ethics, objectivity, fairness and the future of sports journalism.

0101	Mark Selig	Seats (Total: 18)
	M 12:00pm - 2:45pm	ONLINE

JOUR389E **News Coverage of Special Topics; Election 2020**

(Perm req)

Credits: 3 Grading Method: Regular

Advanced training and practice in writing and reporting news in one specialized field of interest.

Prerequisite: JOUR320 or JOUR360. In this class, you will learn political reporting through media criticism. Each day, you will analyze the election reporting of the three major networks, all covering the same events and all aiming at the standards of journalism. If presidential elections are the world's greatest spectator sport, you will have a box seat.

0101	Tom Bettag	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

JOUR396 **Supervised Internship**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Must have earned a grade of C- or better in JOUR320. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR326, JOUR366, or JOUR396.

Students will complete a minimum of 90 hours in a supervised journalism internship over a minimum of 10 weeks in spring and fall, and eight weeks in summer. Emphasis is on relating academic training to professional experience. Students may pick up an internship proposal form in KNI 1100, have their internship supervisor fill it out, and meet with the college's internship director to receive permission to register. No requests to register after the Schedule Adjustment Period will be granted. This requirement would affect incoming freshmen from the fall 2012 class.

0101	Adrianne Flynn	Seats (Total: 45)
	Class time/details on ELMs	ONLINE

JOUR398 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular

Individual projects in journalism.

Contact department for information to register for this course.

JOUR402 **Journalism Law and Ethics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: JOUR201. Credit only granted for: JOUR402 OR JOUR400 and JOUR300.

An examination of the legal rights and ethical problems and constraints of mass media, including libel, privacy, copyright, monopoly and contempt.

0101	LaMonte Summers	Seats (Total: 45)
	Tu 5:00pm - 7:45pm	ONLINE
0201	Sandra Banisky	Seats (Total: 42)
	TuTh 11:00am - 12:15pm	ONLINE

JOUR405 **Breaking News With Numbers: Statistics for Journalists**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Prerequisite: Minimum grade of C- in JOUR201; and (MATH107 or MATH110; or must have completed a higher level math course). Or have permission of the instructor. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Common statistical tools, software and data visualization techniques will be used to allow students to analyze data and solve problems relevant to reporting and writing about politics, sports, criminal justice, business and other fields.

0101	Tom Brune	Seats (Total: 38)
	Class time/details on ELMs	ONLINE

JOUR453 **News Coverage of Racial Issues**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | , D | General Education: DVUP

Restriction: Junior standing or higher.

Analysis of news media coverage of issues relating to racial minorities in the United States, with special attention to Hispanics, Asian Americans, African Americans and Native Americans.

Jointly offered with AASP 499N.

0101	Anne Rosen	Seats (Total: 25)
	TuTh 9:30am - 10:45am	ONLINE

JOUR455 **Media Entrepreneurship**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: JOUR459E or JOUR455. Formerly: JOUR459E.

Basic business and entrepreneurship concepts will be covered and will explore how technology is transforming the business of media. Students develop and pitch ideas for media businesses, learn startup basics, do exercises in Internet advertising and business plan analysis, use social networks and other digital communication tools, and perform other hands-on exercises in business development and presentation.

0101	Constance Ford	Seats (Total: 18)
	M 2:00pm - 4:45pm	ONLINE

JOUR456 **Literature in Journalism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Credit only granted for: JOUR456 or JOUR673.

From Truman Capote's In Cold Blood to Mark Bowden's Black Hawk Down, students will examine how literary works can help writers approach a subject in a different way than more traditional forms of journalism, including the advantages and limitations of the style.

0101	Christopher Hanson Tu 4:15pm - 7:00pm	Seats (Total: 17) ONLINE
0301	Kevin Klose Class time/details on ELMs	Seats (Total: 18) ONLINE

JOUR458B **Special Topics in Journalism; Sports Media Today**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concerns and current interest.

Students will discuss working with various organizations' communications/media relations staff, coaches and players; distributing news of the organizations; and creating/maintaining methods for disseminating the news to the public in an honest and forthright manner. Also, traditional, digital and social media elements will be explored. Restriction: Junior Standing or higher.

0101	Rose DiPaula W 9:00am - 11:45am	Seats (Total: 26) ONLINE

JOUR458M **Special Topics in Journalism; Sports, Protest, and the Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concerns and current interest.

This class will examine the development of our games, the history of of remonstration upon them and the machinations of media at the intersection of the two. It will answer why activists, whether athletes or not, have long commanded ceremonial and ritualistic games to promote a cause or take a stand. It will examine how important the role is of media as a collector, editor, interpreter, and disseminator of information, or news, about athletic competitions, athletes, and political pronouncements revolving around athletic events and their participants.

0101	Kevin Blackistone MW 10:00am - 11:15am	Seats (Total: 15) ONLINE

JOUR458V **Special Topics in Journalism; The Power of the Writing Voice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concerns and current interest.

The course will explore the writing voice. We will examine the rhythm of powerful writing, listen to good music and study the cadence of extra ordinary storytelling.

0101	DeNeen Brown	Seats (Total: 18)
	W 2:00pm - 4:45pm	ONLINE

JOUR459F **Special Topics in Journalism; Media in War and Crisis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459K **Special Topics in Journalism; Global Media and International Journalism in the 21st Century**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459L **Special Topics in Journalism; European Mass Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459R **Special Topics in Journalism; Media and Human Rights in the Internet Age**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

This course will focus on changes in human rights coverage, as journalists and repressive governments develop new strategies to either obtain or suppress information about abuses and public protests. Students will learn about the evolution of media's role in documenting human rights violations, from the U.S. Civil Rights movement to Helsinki Watch to events in contemporary events in Russia and China. Students will have opportunities to report and write publishable articles on human rights issues and internet freedom.

0101	Robert Ruby	Seats (Total: 18)
	M 10:00am - 12:45pm	ONLINE

JOUR459V **Special Topics in Journalism; Media and International Affairs**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR472 **Data Journalism**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: JOUR320 or JOUR360. Jointly offered with JOUR772. Credit only granted for: JOUR472 or JOUR772.

A practical, skills-based course in the basics of modern data journalism, data analysis and data storytelling. Students will learn to use data programming, statistical analysis, visualization tools and investigative reporting techniques to unearth key facts, patterns and proof in storytelling.

Students must contact Assistant Dean Josh Madden for permission to register.

0101	Sean Mussenden	Seats (Total: 16)	
	Tu 11:30am - 1:50pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

JOUR479E **Special Topics in Data Gathering and Analysis; Political Analysis**

(Perm req)

Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

Prerequisite: Must have completed a university statistics course. This course will provide students with advanced research skills to analyze elections, including political parties, candidates, news coverage, and voters. This will include a review of studies of election coverage as well as learning how to deploy a range of research tools in order to gain deeper understanding of elections and voting behavior. Students will learn how to conduct comparative analysis of campaign materials, analyze candidate performance, assess media treatment of candidates, forecast results as well as introduce students to a range of analytical tools for tracking data in traditional and social media.

0101	Sarah Oates	Seats (Total: 18)
	MW 11:00am - 12:15pm Class time/details on ELMs	KNI 1208 ONLINE
	Alternating face-to-face/online class meeting. Please see instructor fo details.	

JOUR479J **Special Topics in Data Gathering and Analysis; Photography, Photo Essays and Multimedia**

(Perm req)

Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

This course will challenge students to evaluate how photographers cover news and investigate social issues through the medium of the photo essay. Students will learn research skills where images are the data; through critical thinking assignments, they will examine the limitations of research methods in considering visual media, as well as explore the distinctive concerns of assessing photocentric journalism relative to ethics, perception and bias. Through their own final photo-essay projects, students will additionally wrestle with why photography and other visual media are increasingly central to news reporting and are a dominant means of communication across both news and social media. Note: The only photographic equipment needed for the course is a smartphone.

0101	Susan Moeller	Seats (Total: 18)
	TuTh 11:00am - 12:15pm	ONLINE

JOUR479O **Special Topics in Data Gathering and Analysis; Understanding Audiences**

(Perm req)

Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

Must have completed a university statistics course. As journalism evolves, it may be more important than ever to understand what were once simply called "audiences"- who they are, how they consume news, and what that engagement means for them and for society. Students will learn to think critically about news audiences and contemporary issues in audience research.

0101	Ronald Yaros	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

JOUR479V **Special Topics in Data Gathering and Analysis; Computational Journalism**

(Perm req)

Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

Jointly offered with JOUR779V and INST408I. Credit only granted for JOUR479V, JOUR779V, or INST408I.

0101	Naeemul Hassan	Seats (Total: 7)
	M 10:00am - 12:45pm Class time/details on ELMs	KNI 3202 ONLINE
	Alternating face-to-face/online class meeting. Please see instructor fo details.	

JOUR480 **Capstone Colloquium: The Business of News**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism; and junior standing or higher; and permission of JOUR-Philip Merrill College of Journalism.

Students will learn the basic news business concepts and examine how revenue and cost structures for media businesses are evolving in new directions. Topics include basic principles and concepts that drive media businesses in the Internet age, including revenue sources, dynamics of online advertising and subscriptions, mobile media strategies, user metrics, engaging audiences, and market dynamics.

0101	Constance Ford	Seats (Total: 58)
	Meets August 31, 2020 - October 19, 2020	
	M 5:30pm - 7:20pm	ONLINE
	Schedule adjustment is the first week of classes only.	

JOUR501 **Fundamentals of Writing and Editing**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of JOUR-Philip Merrill College of Journalism.

Principles of news and feature writing. For graduate students with limited prior training or experience in journalism.

0101	Christine Harvey	Seats (Total: 15)
	TuTh 9:30am - 11:20am Class time/details on ELMs	KNI 1208 ONLINE
	Alternating face-to-face/online class meeting. Please see instructor fo details.	

JOUR601 **Theories of Journalism and Public Communication**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of JOUR-Philip Merrill College of Journalism.

Survey and evaluation of current communication theories. Attention is given to the nature and function of scientific theory, models of communication behavior, the nature of information, social functions of journalism and public communication, attitude change and persuasive communication and theories of language and meaning.

0101	Linda Steiner W 1:00pm - 3:45pm	Seats (Total: 9) ONLINE

JOUR603 **News Videography**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: JOUR504; and permission of Journalism College required. Restriction: Permission of JOUR-Philip Merrill College of Journalism. Jointly offered with JOUR262. Credit only granted for: JOUR503 or JOUR603. Formerly: JOUR503.

Introduction to shooting, editing and production of video stories for broadcast and the Web; includes newsgathering in the field.

0301	Alanna Delfino M 7:00pm - 8:50pm W 7:00pm - 8:50pm	Seats (Total: 1) KNI 3210 ONLINE
0401	Bethany Swain M 12:00pm - 1:50pm W 12:00pm - 1:50pm	Seats (Total: 12) ONLINE KNI 1200

JOUR604 **Introduction to Multimedia Skills for Graduate Certificate Programs**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of JOUR-Philip Merrill College of Journalism; and must not have completed JOUR504. Credit only granted for: JOUR 604, JOUR504, or JOUR628G. Formerly: JOUR628G. Additional information: This course is for students enrolled in graduate certificate programs in the College of Journalism.

Examine the basics of producing and editing digital photos, video and audio for news. Topics include framing, lighting and other aspects of composition; sequencing, using wide, medium and tight shots; and ethical considerations when collecting sound and visuals.

PWJ1	Nicole Munchel Sa 8:30am - 12:15pm	Seats (Total: 15) ONLINE
	Must be in MultiMedia Journalism program. For permission to enroll, contact oes@umd.edu.	

JOUR620 **Public Affairs Reporting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: JOUR501; or permission of JOUR-Philip Merrill College of Journalism.

Designed to add to and sharpen the skills learned in JOUR501. It is primarily an introduction to "beat" reporting that allows students to sample the most common new beats while reporting and writing on deadline. Students are required to develop and hone their multimedia skills by reporting in a variety of media.

0101	Adrianne Flynn Th 9:30am - 11:20am Tu 9:30am - 11:20am	Seats (Total: 8) KNI 3202 ONLINE

JOUR625 **Advanced Capital News Service Bureau**

(Perm req)

Credits: 6 Grading Method: Regular, Audit

Prerequisite: JOUR620; and permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR625 or JOUR729. Formerly: JOUR729.

Advanced journalism training. Students report as part of College's Capital News Service program.

0101	James Carroll Contact instructor or department for details.	Seats (Total: 10)
0201	Karen Denny Contact instructor or department for details.	Seats (Total: 10)

JOUR627 **Urban Affairs Reporting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: JOUR501; and permission of JOUR-Philip Merrill College of Journalism. Corequisite: JOUR620; or permission of JOUR-Philip Merrill College of Journalism. Jointly offered with JOUR327. Credit only granted for: JOUR327 or JOUR627.

Students are immersed in coverage of issues affecting cities, working on a semester-long multi-platform reporting project based in Baltimore.

Students will use Baltimore as a working laboratory to report on urban issues. Course meets in Baltimore.

0101	Sandra Banisky	Seats (Total: 6)
	M 1:45pm - 4:30pm	Location: TBA

JOUR628C **Specialized Topics in News Writing and Reporting; Advanced Howard Center Investigations I**

(Perm req)

Credits: 3 Grading Method: Regular

Advanced training and practice in writing and reporting news. Repeatable to a maximum of six credits provided the content differs.

Advanced journalism training. Students work on investigative projects as part of the College's Howard Center for Investigative Journalism.

0101	Kathy Best	Seats (Total: 5)
	Contact instructor or department for details.	

JOUR628I **Specialized Topics in News Writing and Reporting; Advanced Howard Center Investigations II**

(Perm req)

Credits: 3 Grading Method: Regular

Advanced training and practice in writing and reporting news. Repeatable to a maximum of six credits provided the content differs.

Advanced journalism training. Students work on in-depth investigative projects as part of the College's Howard Center for Investigative Journalism.

0101	Kathy Best	Seats (Total: 5)
	Contact instructor or department for details.	

JOUR628R **Specialized Topics in News Writing and Reporting; Business and Economic Reporting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advanced training and practice in writing and reporting news. Repeatable to a maximum of six credits provided the content differs.

Prerequisite: JOUR620. Students will explore why economic and business themes are among the top stories generating reader interest. Topics vary each semester but can focus on the economic impact of immigration, employment, income inequality, wage stagnation, trade wars and affordable housing. Students will learn to identify newsworthy stories and interpret and integrate numbers and financial data into stories in acompelling way.

0101	Constance Ford	Seats (Total: 2)
	W 10:00am - 12:45pm	ONLINE

JOUR628V **Specialized Topics in News Writing and Reporting; Covering Comic Book Culture in Entertainment**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Advanced training and practice in writing and reporting news. Repeatable to a maximum of six credits provided the content differs.

Prerequisite: JOUR501. Comic book culture's evolving impact in entertainment has been vast and rapidly growing. This course will look at the humble beginnings of comic book culture in entertainment, from the comic books themselves, to the adaptations that have become big business for movies, television, streaming and animation as well as how to write on/cover those moments.

0101	David Betancourt	Seats (Total: 1)
	Tu 6:00pm - 8:45pm	ONLINE

JOUR652 **Interactive Design and Development**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Corequisite: Offered to students enrolled in the journalism master's degree or certificate. Master's degree students should take JOUR 504 as a pre- or co-requisite. Certificate students are encouraged to take JOUR 604 as a co-requisite. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR652 or JOUR352.

Conceptualize, wireframe, design and build responsive Web pages using HTML, style sheets and other coding tools; work with open source interactive tools and JavaScript libraries to create charts, timelines and maps to tell stories.

0401	Adam Marton	Seats (Total: 15)
	W 2:00pm - 4:45pm	ONLINE
PWJ1	Gagan Nirula	Seats (Total: 15)
	Sa 1:30pm - 5:15pm	ONLINE

JOUR655 **Advanced Online News Bureau**

(Perm req)

Credits: 6

Grading Method: Regular, Audit

Prerequisite: JOUR603 or JOUR620; and (JOUR504 and JOUR652). Or permission of JOUR-Philip Merrill College of Journalism.

Advanced online journalism training. Students work as online reporters, editors and producers for a news site. Students also package copy from the print and broadcast news bureaus.

Prerequisites: JOUR 620 and 652 or equivalent. Contact the instructor to obtain permission. Course shares space with JOUR355.

0101	Adam Marton Contact instructor or department for details.	Seats (Total: 4)
0201	Alexander Pyles Contact instructor or department for details.	Seats (Total: 4)

JOUR660 **Broadcast News Writing**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: JOUR501. Credit only granted for: JOUR660 or JOUR760. Formerly: JOUR760.

Descriptive and critical analysis of broadcast news; methods of evaluation of news judgments; decision-making and organizational aspects of the broadcast news industry.

0101	Mark Feldstein MW 10:30am - 11:45am	Seats (Total: 6) ONLINE

JOUR662 **Broadcast News Producing**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR661; and (JOUR603 and JOUR660). Jointly offered with JOUR362. Cred it only granted for: JOUR668B or JOUR662. Formerly: JOUR668B.

Learn and practice the basics of broadcast newscast producing. Design, write, edit and implement a news program.

0101	Cindy Wright Tu 7:15pm - 9:15pm Tu 2:00pm - 6:50pm	Seats (Total: 1) TWS 0117 TWS 0117	 Lab

JOUR664 **Radio Broadcasting**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: JOUR501 and JOUR603; or permission of JOUR-Philip Merrill College of Journalism. Restriction: Permission of JOUR-Philip Merrill College of Journalism.

Students apply news reporting skills to prepare and produce a weekly radio news magazine program.

0101	Robert Little	Seats (Total: 8)
	W 5:30pm - 8:15pm Class time/details on ELMs	KNI 3210 ONLINE
	Alternating face-to-face/online class meeting. Please see instructor fo details.	

JOUR667 **Broadcast News Bureau**

(Perm req)

Credits: 6

Grading Method: Regular, Audit

Prerequisite: JOUR503; or students who have taken courses with comparable content may contact the department. And permission of JOUR-Philip Merrill College of Journalism.

Advanced broadcast journalism training. Students report as part of the College's Capital News Service program.

Jointly offered with JOUR367.

0101	Mel Coffee	Seats (Total: 15)
	Contact instructor or department for details.	

JOUR668D **Topics in Broadcasting and Electronic Media; Social Media Content Creation, Audience Engagement and Analytics**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Advance research and analysis of selected topics in broadcast journalism.

Prerequisite: JOUR620. This class will provide students with an overview of social media best practices for journalists, and will work to develop their skills in the following areas: social content creation, audience engagement, sourcing and verification and analytics. By the end of this course, students will have the practical skills needed to managea social media account for themselves (as student or professional journalists) or contribute to the management of a news organization's social media pwesence.

0101	Alexander Pyles	Seats (Total: 5)
	Th 12:30pm - 1:45pm	ONLINE
	Class time/details on ELMs	ONLINE

JOUR668I **Topics in Broadcasting and Electronic Media; Designing Stories with Motion Graphics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advance research and analysis of selected topics in broadcast journalism.

Prerequisite: JOUR504 or JOUR603. In this course, students will learn how to create motion graphics that turn data and facts into visually compelling animated stories. Students will learn theories and practices of animation, design and visual journalism. After completing this course, students will have a solid grasp of storyboarding, scripting and creating motion graphic stories using the Adobe After Effects software.

0101	Krishnan Vasudevan	Seats (Total: 1)
	MW 12:30pm - 1:45pm	ONLINE

JOUR668K **Topics in Broadcasting and Electronic Media; Video Innovation**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advance research and analysis of selected topics in broadcast journalism.

Prerequisite: JOUR661 and permission of the instructor (jdavidsb@umd.edu). Students will explore the intersection between social media, video and a live broadcast by creating new and innovative ways to "broadcast" news to an audience. The class will encourage an entrepreneurial spirit and give students the opportunity to produce a show from scratch, with content aired on UMTV and online. In addition to creating television, students will support the broadcast arm of Capital News Service by managing volunteers, filling in on the studio staff and producing special projects and graphics when necessary.

0101	Joshua Davidsburg	Seats (Total: 6)
	M 2:00pm - 4:45pm	KNI 3202

JOUR668L **Topics in Broadcasting and Electronic Media; Audio and Podcast Reporting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advance research and analysis of selected topics in broadcast journalism.

Prerequisite: JOUR660 or permission of Associate Dean Rafael Lorente. Students will learn the tools needed to report and produce short and long-form audio storytelling, including writing, reporting, interviewing, production, editing, hosting and delivery. Field reporting and audio gathering outside of class is required, along with writing and mixing broadcast-quality audio stories. Together the class will produce a complete radio broadcast on deadline from newscasts to live interviewsto mixed radio pieces. Various interests in audio reporting welcome and encouraged.

0101	Jennifer Beemsterboer	Seats (Total: 4)
	Tu 5:30pm - 8:15pm	ONLINE

JOUR670 **Photojournalism**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: JOUR504. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism; and permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR 368P, JOUR 370 or JOUR 670. Additional information: Students are required to borrow, rent or purchase a 35mm digital camera. Contact department for camera specifications.

Examining the basics of shooting, editing and storytelling with still photos taken with 35mm digital cameras. Students shoot portraits, feature photos and action shots. Final project is a photo story/essay.

0101	Mauro Whiteman	Seats (Total: 10)
	F 9:00am - 11:45am	KNI 1200

JOUR689E **News Coverage of Specialized Topics; Election 2020**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advance training and practice in writing and reporting news in on specialized field of interest.

Prerequisite: JOUR620. In this class, you will learn political reporting through media criticism. Each day, you will analyze the election reporting of the three major networks, all covering the same events and all aiming at the standards of journalism. If presidential elections are the world's greatest spectator sport, you will have a box seat.

0101	Tom Bettag	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

JOUR689F **News Coverage of Specialized Topics; Feature Writing**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advance training and practice in writing and reporting news in on specialized field of interest.

Prerequisite: JOUR620. Research and writing feature articles.

0101	DeNeen Brown	Seats (Total: 2)
	M 2:00pm - 4:45pm	ONLINE

JOUR698 **Special Problems in Communication**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Independent study in area of the student's interest.

Contact department for information to register for this course.

JOUR698I **Special Problems in Communication; Advanced Public Affairs Reporting/Investigative Journalism**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent study in area of the student's interest.

Prerequisites: JOUR501. Students will learn the essentials of accountability reporting while producing a publishable, in-depth project on an issue with national significance and impact on people's lives. Substantial fieldwork, teamwork and persistence are required.

0101	Deborah Nelson	Seats (Total: 3)
	Contact instructor or department for details.	
	Contact department or instructor for details.	

JOUR702 **Journalism Law and Ethics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in one of the following programs (Journalism - Master (Master's); Journalism Studies (Doctoral)) ; or permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR400, JOUR 600, JOUR700, or JOUR 702.

An examination of the legal rights and ethical problems and constraints of mass media, including libel, privacy, copyright, monopoly and contempt.

0101	Sandra Banisky	Seats (Total: 36)
	TuTh 2:00pm - 3:15pm	ONLINE

JOUR772 **Data Journalism**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in JOUR501; or students who have taken courses with comparable content may contact the department. Credit only granted for: JOUR472 or JOUR772.

A practical, skills-based course in the basics of modern data journalism, data analysis and data storytelling. Students will learn to use data programming, statistical analysis, visualization tools and investigative reporting techniques to unearth key facts, patterns and proof in storytelling.

0101	Sean Mussenden	Seats (Total: 4)	
	Tu 11:30am - 1:50pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

JOUR775 **Quantitative Methods in Journalism and Public Communication Research**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: JOUR701 or JOUR775. Formerly: JOUR701.

Logic and methods of quantitative data collection and statistical analysis as applied to journalism and public communication studies.

0101	Ronald Yaros	Seats (Total: 8)
	Th 11:00am - 1:45pm	ONLINE

JOUR779V **Seminar in Research Problems; Computational Journalism**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Methods of research design and analysis in specialized areas of journalism and public communication research.

Jointly offered with JOUR479V or INST408I. Credit only granted for JOUR479V, JOUR779V, or INST408I.

0101	Naeemul Hassan	Seats (Total: 3)
	M 10:00am - 12:45pm	KNI 3202
	Class time/details on ELMs	ONLINE
	Alternating face-to-face/online class meeting. Please see instructor fo details.	

JOUR798 **Master's Professional Fieldwork**

(Perm req)

Credits: 2-6 Grading Method: Sat-Fail

Research for and preparation of news articles or programs for use in the media. Analysis of fieldwork experience using communication theory and research results. Fieldwork may be done independently or as an internship. Repeatable to a maximum of six credits.

Contact department for information to register for this course.

JOUR799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

JOUR800 **Introduction to Doctoral Study in Journalism and Public Communication**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: JOUR700 or JOUR800. Formerly: JOUR700.

Basic skills in journalism and public communication research.

0101	Krishnan Vasudevan	Seats (Total: 10)
	M 3:00pm - 5:45pm	ONLINE

JOUR888 **Doctoral Professional Field Work**

Credits: 3-9 Grading Method: Regular, Audit

Critical analysis of a phase of a professional field in journalism and public communication. Analysis of professional activity through personal observation. Evaluation of the purpose, process, effectiveness, and efficiency of professional activity. Recommendations for training and further research.

Contact department for information to register for this course.

JOUR889 **Doctoral Tutorial in Journalism and Public Communication**

Credits: 3-9 Grading Method: Regular, Audit

Individual research in journalism and public communication.

Contact department for information to register for this course.

JOUR898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

JOUR899 **Doctoral Dissertation Research in Journalism and Mass Communication**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

JWST Jewish Studies Fall 2020

JWST141 **American Jewish Experience**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, DVUP

Cross-listed with HIST106. Credit only granted for: HIST106 or JWST141.

History of the Jews in America from Colonial times to the present. Emphasis on the waves of migration from Germany and Eastern Europe; the changing nature of the American Jewish community and its participation in American social, economic, and political life.

0101	Marsha Rozenblit TuTh 9:30am - 10:45am	Seats (Total: 40) ONLINE	

JWST187 **God, Land, Power, and the People: Moral Issues in the Jewish Historical Experience**

Credits: 3 | Grading Method: Regular | General Education: DSHS, DSHU, DVUP, SCIS

Cross-listed with: HIST187. Credit only granted for: HIST187 or JWST187.

Examines the complicated relationship between theology, nationalism, sovereignty, and the ethical exercise of social control using case studies drawn from the Jewish historical experience. The universal and age-old issues implicit in the exercise of power have gained special moral force for Jews with the creation of the State of Israel, a Jewish and a democratic state with substantial non-Jewish minorities and hundreds of thousands of non-citizen subjects. Can these be reconciled? Jewish efforts over the ages and in recent times to define justice provide concrete examples through which to examine and discuss crucial abstract principles.

0101	Bernard Cooperman TuTh 3:30pm - 4:20pm F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Bernard Cooperman TuTh 3:30pm - 4:20pm F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

0103	Bernard Cooperman	Seats (Total: 24)	
	TuTh 3:30pm - 4:20pm	ONLINE	
	F 2:00pm - 2:50pm	ONLINE	Discussion

JWST219C **Special Topics in Jewish Studies; Contemporary Israel: History and Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

JWST219D **Special Topics in Jewish Studies; Women in Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

JWST219E **Special Topics in Jewish Studies; Writing Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

JWST219G **Zionism and Sexual Revolution**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Cross-listed with: ISRL249N. Credit only granted for: ISRL249N or JWST219G.

Cross-listed with ISRL249N. Credit granted for JWST219G or ISRL249N. In this course we will look at changes within European Jewish communities that influenced the development of particular fantasies about and representations of gender, love, and sex, and we will examine the ideological import of these ideas within the context of attempts to construct new forms of societies and relationships in Palestine and Israel.

0101	Shirelle Doughty	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

JWST262 **Introduction to the Hebrew Bible/Old Testament**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Cross-listed with: ENGL262, HEBR298B. Credit only granted for: JWST262, HEBR293B, or ENGL262.

Origins of the Hebrew Bible (Old Testament), with attention to literary formations, archaeology, and social-political settings. Explorations of major questions, including who wrote the Bible, and when; relationships of the biblical tradition to the mythology and religious structures of ancient Israel's near eastern neighbors; and dynamics of politics, religious leadership, and law.

0101	Matthew Suriano	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

JWST281 **Yiddish I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Introduction to the Yiddish language, with emphasis on speaking, reading, and writing skills. Students will also learn the history of the language, its significance to Jewish culture, its origins and basic structure.

Jointly offered with GERM148Y. Credit only granted for JWST281 or GERM14 8Y.

0101	Adi Mahalel	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE
	Class time/details on ELMs	ONLINE
	This is a Big Ten Academic Alliance Course-Share Course.	

JWST289A **New Explorations in Jewish Studies; Can Jews be Arabs? Identity and Crisis for the Jews of Arab Lands in Modern Times**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

Investigation of critical and innovative responses in Jewish Studies. Although the topic will vary, the course will encourage intellectual exploration by students of fundamental problems and critical methods.

Crosslisted with HIST219C. Credit only granted for JWST289A or HIST219C. Examines the complex and fraught history of the Jews of Arab lands in modern times, with a focus on questions of identity, relationship with Christian and Muslim Arabs, and the impact of Zionism and Arab nationalism.

0101	Shay Hazkani	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

JWST289E **Civil Discourse or Urban Riot: Why Cities Don't (Often) Explode**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP, SCIS

Cross-listed with: HIST135. Credit only granted for: HIST135 or JWST289E.

An examination of the mechanisms that promote peaceful co-existence in urban societies and a discussion of how and why city streets sometimes become violent.

0101	Bernard Cooperman TuTh 11:00am - 11:50am W 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Bernard Cooperman TuTh 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Bernard Cooperman TuTh 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

JWST289J **Jerusalem in Antiquity: The History of Sacred Space in a Holy City**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHU, DVUP, SCIS

Cross-listed with: RELS289J. Credit only granted for: JWST289J or RELS289J.

Cross-listed with RELS289J. Credit will be granted for JWST289J or RELS289J. Examines the complex history of Jerusalem's status as a holy city, with a focus on constructions of sacred space in Judaism, Christianity, and Islam.

0101	Matthew Suriano MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Matthew Suriano MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Matthew Suriano MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Matthew Suriano MW 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

JWST319B **Special Topics in Jewish Studies; Arab-Israeli Relations**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Topics in Jewish Studies.

Contact department for information to register for this course.

JWST319E **Special Topics in Jewish Studies; Literature of the Shoah**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Topics in Jewish Studies.

Contact department for information to register for this course.

JWST319N **The Israeli Settler Movement: The Road to One State?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Cross-listed with: HIST329G, ISRL329G. Credit only granted for: HIST329G, ISRL329G or JWST319N.

An exploration of the Israeli settler movement in the West Bank and its rise to prominence in Israeli politics in the last two decades. We will also examine how the success of the settlers influences the prospects of a two-state solution for the Israeli-Palestinian conflict, as well as the merit of claims that Israel-Palestine is already under a "one-state" reality.

0101	Shay Hazkani	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

JWST325 **Jews and Judaism in Antiquity I: Sixth Century BCE through the First Century CE**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSSP, DVUP

Cross-listed with HIST370. Credit only granted for: HIST370 or JWST325.

Political, social, and religious history of the Jews from the Persian Period to the Judean Revolt of 66-70CE. Special attention to the rise of sectarian and revolutionary movements.

0101	Hayim Lapin	Seats (Total: 40)
	MW 2:00pm - 3:15pm	ONLINE

JWST344 **Modern Jewish History II: World Jewry Since 1870**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Cross-listed with HIST375. Credit only granted for: HIST375 or JWST344.

Social, political, economic, and cultural change in the Jewish world since 1870. Emphasis on emancipation, assimilation, and new forms of Jewish identity in Western and Eastern European Jewry from the 19th Century to the present.

0101	Marsha Rozenblit TuTh 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

JWST347 **Tradition and Change: Jewish Religion in the Modern World**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHS, DSHU, DVUP

Cross-listed with: HIST429X, RELS419R. Credit only granted for: JWST347, HIST429X, or RELS419R.

An exploration of the history of the different modern Jewish religious movements that developed in Europe, starting with messianic movements and ending with Reform and Orthodoxy. Emphasis will be placed on the influence of the academic study of Judaism on the development of modern Jewish religious ideologies and practices.

Cross-listed with HIST429X and RELS419R.

0101	Rachel Manekin MW 4:00pm - 5:15pm	Seats (Total: 40) ONLINE

JWST369A **Special Topics in Study Abroad III; The Holocaust: 20th Century Jewish Thought**

Credits: 1-6

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

JWST370 **Before the Holocaust: The Golden Age of Eastern European Jewry**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHS, DVUP

Cross-listed with: HIST419Q. Credit only granted for: JWST419E, JWST370, or HIST419Q. Formerly: JWST419E.

An exploration of the history of the Jews of Eastern Europe from the period of the Polish Lithuanian Commonwealth until the Holocaust. Topics to be covered include religious, political, social, and cultural transformation of Jewish life in Eastern Europe in the context of the general political changes in the area.

Jointly offered with HIST419Q. Credit granted for JWST370 or HIST419Q.

0101	Rachel Manekin	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

JWST408 **Honors Seminar in Jewish Studies**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An in-depth exploration of a theme in Jewish history, literature, culture or thought. Course subject and readings will vary from year to year, but will generally cut across periods, locations, or disciplines. Students are expected to engage the course material critically and to use the seminar as an opportunity to develop an independent research agenda.

Contact department for information to register for this course.

JWST409 **Research Seminar in Jewish Studies**

(Perm req)

Credits: 3-4 Grading Method: Regular, Pass-Fail, Audit

A capstone course for Jewish Studies. Guides students through advanced source material and subject matter, research skills, and presentation techniques. A substantive paper based on independent research and analysis is one expected outcome.

Contact department for information to register for this course.

JWST418 **Honors Thesis Research in Jewish Studies**

(Perm req)

Credits: 3 Grading Method: Regular

Guided research on a thesis under the supervision of the Jewish Studies faculty.

Contact department for information to register for this course.

JWST429B **Classical Arabic Philosophy by Muslims and Jews**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Cross-listed with: PHIL428B. Credit only granted for: PHIL428B or JWST429B.

An introduction to classical Arabic philosophy from the ninth to the thirteenth centuries of the Christian era. But unlike most courses on this topic, we shall not be reading philosophy solely by Muslims but also by Jews (and maybe Christians). In a sense, the course is best described by the title of the book by Dimitri Gutas, "Greek Thought, Arabic Culture".

Cross-listed with PHIL428B. Credit only granted for PHIL428B or JWST429B.

0101	Charles Manekin	Seats (Total: 30)	
	M 3:30pm - 4:45pm Class time/details on ELMs	ONLINE ONLINE	 Discussion

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JWST452 **The Golden Age of Jewish Philosophy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: 3 credits in PHIL courses; or permission of ARHU-Meyerhoff Program & Center for Jewish Studies; or permission of ARHU-Philosophy department. Cross-listed with PHIL417. Credit only granted for: JWST452 or PHIL417.

Jewish philosophy from Maimonides in the 12th century to the expulsion of the Jews from Spain at the end of the 15th Century. Topics include the limitations of human knowledge, creation of the world, foreknowledge and free will, and the existence of God.

0101	Charles Manekin	Seats (Total: 30)	
	M 2:00pm - 3:15pm Class time/details on ELMs	ONLINE ONLINE	 Discussion

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JWST459 **Readings in Medieval Hebrew**

(Perm req)

Credits: 3-4 | Grading Method: Regular, Pass-Fail, Audit

Readings and analysis of Hebrew texts and literature from the Middle Ages. Language of instruction in English; all texts in Hebrew.

Contact department for information to register for this course.

JWST468 **Readings in the Hebrew Bible**

(Perm req)

Credits: 3-4 | Grading Method: Regular, Pass-Fail, Audit

Readings in the Hebrew text of the Bible. Emphasis in close reading, grammar analysis, and modern interpretations of the Bible. Language of instruction English; all texts in Hebrew.

Contact department for information to register for this course.

JWST469 **Readings in Rabbinic Hebrew**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Readings in classical rabbinic texts and related corpora. Emphasis on grammar and reading skills as well as critical analysis of the material. Language of instruction: English; all texts in original language.

Knowedge of Hebrw and/or permission of Instructor. Readings in Classical Rabbinic Texts and related corpora. Emphasis on grammar and reading skills as well as critical analysis of the material. Language of instruction: English; all texts

Contact department for information to register for this course.

JWST478 **Readings in Modern Hebrew**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Variable topics in Modern Hebrew Literature.

Contact department for information to register for this course.

JWST492 **Sex, Gender, and Jewish Identity**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHU, DVUP

Prerequisite: 1 course in WMST; or 1 course in JWST; or 1 course in LGBT; or permission of instructor. Cross-listed with: LGBT448W, WMST498W. Credit only granted for: JWST492, JWST409G, JWST419W, LGBT448W, or WMST498W. Formerly: JWST409G and JWST419W.

An exploration of Jewish embodiment, including dynamics related to biological sex, culturally-framed gender, and sexuality. Topics of discussion may include transgender and intersex Jews, stereotypes and gender performance, modesty, genetics, and body alteration. Focus is on contemporary Jewish culture, framed within the larger historical and textual tradition.

0101	Maxine Grossman	Seats (Total: 25)
	Th 4:00pm - 6:30pm	ONLINE

JWST499 **Independent Study in Jewish Studies; Independent Study in Jewish Studies**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

JWST609 **Supervised Instruction-Practicum in Jewish Studies**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Supervised instruction or supervised practicum in Jewish Studies. Intended for graduate students whose course work includes field work or classroom teaching.

Contact department for information to register for this course.

JWST619 **Directed Readings in Jewish Studies**

(Perm req)

Credits: 3 Grading Method: Regular

Independent Study in Jewish Studies. Readings and papers.

Contact department for information to register for this course.

JWST648 **Readings in Jewish History**

(Perm req)

Credits: 3 Grading Method: Regular

Focus on the central issues in Jewish history as well as the key historiographical debates on those issues.

Prerequisite: permission of department. Repeatable to 9 credits if content differs. Focus on the central issues in Jewish history as well as the key historiographical debates on those issues.

Contact department for information to register for this course.

JWST658 **Readings in Jewish Thought and Culture**

(Perm req)

Credits: 3 Grading Method: Regular

Examines key issues in the development of Jewish thought and culture.

Prerequisite: permission of department. Repeatable to 9 credits if content differs. Examines key issues in the development of Jewish thought and culture.

Contact department for information to register for this course.

JWST678 **Readings in Jewish Literature**

(Perm req)

Credits: 3 Grading Method: Regular

Examines selected themes or literatures in the development of Jewish literary traditions.

Prerequisite: permission of department. Repeatable to 9 credits if content differs. Examines selected themes on literatures in the development of Jewish literary traditions.

Contact department for information to register for this course.

JWST799 **Masters Thesis Research**

(Perm req) Credits: 1-6 Grading Method: Sat-Fail

Research and Writing the Masters Thesis in Jewish Studies.

Prerequisite: permission of department.

Contact department for information to register for this course.

KNES Kinesiology Fall 2020

KNES120A **Fitness Walking**

Credits: 1 Grading Method: Regular, Pass-Fail

This is a co-ed physical activity course for beginning fitness walking.

Attendance is required of all students (via ELMS response) beginning the first day of class. Schedule adjustment is the first week of classes only. Students must pay a $8 instructional materials fee.

0101	Andrew Ginsberg	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0102	Andrew Ginsberg	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0103	Andrew Ginsberg	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0104	Andrew Ginsberg	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0105	Andrew Ginsberg	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0106	Andrew Ginsberg	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

KNES131V **Physical Education Activities: Coed; Jogging (BEGINNING)**

Credits: 2

Grading Method: Regular, Pass-Fail

Attendance is required of all students (via ELMS response) beginning the first day of class. Students must pay a $8 instructional materials fee.

0101	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0102	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0103	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0104	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0105	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0106	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0107	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0108	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0109	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

0110	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0111	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0112	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
FC01	Andrea Liberto	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshman Connection.		

KNES137N **Physical Education Activities: Coed; Golf (Beginning)**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required the first day of class. Schedule adjustment is the first week of class only. Students must pay a $40 instructional materials fee directly to the golf course.

0101	Jeff Maynor	Seats (Total: 20)	
	Meets August 31, 2020 - October 16, 2020		
	MW 10:00am - 12:00pm	GLF 1102	Lab

KNES137O **Physical Education Activities: Coed; Golf (Intermediate)**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required the first day of class. Schedule adjustment is the first week of class only. Students must pay a $40.00 instructional materials fee directly to golf course.

0101	Jeff Maynor	Seats (Total: 20)	
	Meets August 31, 2020 - October 16, 2020		
	MW 12:00pm - 2:00pm	GLF 1102	Lab

KNES144Q **Physical Education Activities: Coed; Martial Arts, Karate (Beginning)**

Credits: 2

Grading Method: Regular, Pass-Fail

Attendance is required of all students beginning the first day of class. Students must pay a $8 instructional materials fee.

0101	Kenneth Klotz	Seats (Total: 50)	
	MW 10:00am - 12:00pm	ONLINE	Lab

KNES144R **Physical Education Activities: Coed; Intermediate Karate**

Credits: 2

Grading Method: Regular, Pass-Fail

Attendance on the first day of class is required. Students must pay a $8 instructional materials fee.

0101	Michael Dorothy	Seats (Total: 50)	
	TuTh 9:00am - 11:00am	ONLINE	Lab

KNES144T **Physical Education Activities: Coed; Self-Defense (Beginning)**

Credits: 2

Grading Method: Regular, Pass-Fail

Attendance is required of all students beginning the first day of class. Students must pay a $8 instructional materials fee.

0101	Kenneth Klotz	Seats (Total: 50)	
	MW 8:00am - 10:00am	ONLINE	Lab

KNES161F **Physical Education Activities: Coed; Yoga for Fitness (Beginning)**

Credits: 1

Grading Method: Regular, Pass-Fail

Attendance on the first day of class is required. Students must pay a $8 instructional materials fee.

0101	Laura Rush	Seats (Total: 50)	
	TuTh 3:00pm - 4:15pm	ONLINE	Lab

KNES161N **Physical Education Activities: Coed; Conditioning (Beginning)**

Credits: 1

Grading Method: Regular, Pass-Fail

Attendance is required of all students (via ELMS response) beginning the first day of class. Schedule adjustment is the first week of classes only. Students must pay a $8 instructional materials fee.

0101	Jo Zimmerman	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0102	Jo Zimmerman	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0103	Jo Zimmerman	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0104	Jo Zimmerman	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0105	Jo Zimmerman	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0106	Jo Zimmerman	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0107	Jo Zimmerman	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0108	Jo Zimmerman	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

KNES161T **Physical Education Activities: Coed; Yoga**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required of all students beginning the first day of class. Schedule adjustment is the first week of classes only. Students must fay a $8 instructional materials fee.

0101	Kate Shin	Seats (Total: 60)
	Meets August 31, 2020 - October 16, 2020	
	TuTh 11:00am - 1:00pm	ONLINE
0201	Kate Shin	Seats (Total: 60)
	Meets October 19, 2020 - December 14, 2020	
	TuTh 11:00am - 1:00pm	ONLINE

KNES200 **Introduction to Kinesiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Kinesiology program; and freshman standing. Or must not be in Kinesiology program; and must have less than 60 credits. Credit only granted for: KNES200 or KNES289M.

An overview of kinesiology, the interdisciplinary study of physical activity. Examines human motor behavior and its cultural forms such as sport from the physiological, psychological, sociological, historical, philosophical, and biomechanical perspectives.

0101	Andrea Liberto	Seats (Total: 80)
	Class time/details on ELMs	ONLINE

KNES201 **Kinesiological Principles of Physical Activity**

Credits: 1 Grading Method: Regular, Pass-Fail

Corequisite: Any physical activity course, e.g., KNES 100-190; or permission of SPHL-Kinesiology department. Restriction: Must be in a major in SPHL-School of Public Health. Credit only granted for: KNES200 or KNES201.

An introduction to Kinesiology, the study of human movement, through the experience of learning a specific motor skill or being engaged in physical activity. Emphasis on the theories and knowledge underlying the learning and performance of all motor and sport skills.

KNES Majors Only.

0101	Andrea Liberto	Seats (Total: 25)
	Meets August 31, 2020 - October 17, 2020	
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

0103	Andrew Ginsberg **Meets August 31, 2020 - October 17, 2020** Class time/details on ELMs Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE	
0105	Andrew Ginsberg **Meets August 31, 2020 - October 17, 2020** Class time/details on ELMs Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE	
0109	Steven Kahl **Meets August 31, 2020 - October 17, 2020** Class time/details on ELMs Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE	
0203	Steven Kahl **Meets October 19, 2020 - December 14, 2020** Class time/details on ELMs Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE	

KNES214 **Science and Methods of Personal Fitness Instruction**

Credits: 3 Grading Method: Regular General Education: DSSP

Credit only granted for: KNES214 or KNES210 and KNES211, or KNES210 and KNES212, or KNES289N. Formerly: KNES210/KNES211, KNES210/KNES212, and KNES289N.

Basic concepts of human anatomy, exercise physiology, applied kinesiology, nutrition and the physiology of exercise training. Includes the CORE knowledge required for the American Council on Exercise (ACE) Personal Trainer certification.

0101	Rosemary Lindle Class time/details on ELMs M 8:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Lab
0102	Rosemary Lindle Class time/details on ELMs W 8:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	 Lab

KNES222 **Gambling in the New Millennium: Poker, The Preakness, Point-spreads, Powerball and Public Policy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Recommended: ENGL101 and COMM107.

Is gambling in the public interest? Students will critically examine the various implications of "what it means to gamble" through investigations of various gambling forms, different sectors of the gambling industry and the related economics, along with consumer behavior, sport, public policy and public health in this context.

0101	Stephen McDaniel MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Stephen McDaniel MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Stephen McDaniel MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Stephen McDaniel MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

KNES235 **Swimming Pool Management**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: KNES235 or KNES335. Formerly: KNES335.

Analysis of the position of the swimming pool manager. The systematic treatment of swimming pool water; swimming pool first aid; and laws pertaining to swimming pool operation. Qualifies the student for a pool operator's license in most Maryland counties.

0101	John Felts, Natalie Taylor TuTh 9:30am - 10:30am	Seats (Total: 35) ONLINE

KNES260 **Science of Physical Activity and Cardiovascular Health**

Credits: 3 | Grading Method: Regular, Pass-Fail | CORE: LS | General Education: DSNS

Course details (1) the public health importance of and the processes underlying cardiovascular disease, (2) the risk factors for cardiovascular disease and the methods whereby they were identified, and (3) the principles of the scientific evidence supporting the use of physical activity to prevent cardiovascular disease.

0101	James Hagberg MW 12:00pm - 12:50pm M 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	James Hagberg MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

KNES282 **Basic Care and Prevention of Athletic Injuries**

Credits: 3 | Grading Method: Regular, Pass-Fail

Restriction: Must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES282 or KNES381.

Theoretical and practical foundations of the prevention, treatment and rehabilitation of athletically related injuries. Topics include: physical conditioning, preventive taping, recognition of injuries, first aid and CPR.

KNES Majors only.

0101	Joanne Klossner TuTh 2:00pm - 3:15pm *This section is for KNES Majors Only.*	Seats (Total: 40) ONLINE	

KNES287 **Sport and American Society**

Credits: 3 | Grading Method: Regular, Pass-Fail | CORE: SB, D | General Education: DSHS, DVUP

Sport will be related to such social problems as delinquency, segregation, collective behavior, and leisure; to social processes such as socialization, stratification, mobility, and social control; and to those familiar social institutions the family, the school, the church, the military, the economy, the polity, and the mass media.

0101	David Andrews Class time/details on ELMs M 8:00am - 8:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
0102	David Andrews Class time/details on ELMs M 9:00am - 9:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
0103	David Andrews Class time/details on ELMs M 10:00am - 10:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
0104	David Andrews Class time/details on ELMs W 8:00am - 8:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
0105	David Andrews Class time/details on ELMs W 9:00am - 9:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
0106	David Andrews Class time/details on ELMs W 10:00am - 10:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
0107	David Andrews Class time/details on ELMs M 11:00am - 11:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
0108	David Andrews Class time/details on ELMs W 11:00am - 11:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
FC01	Eric Stone MW 6:00pm - 7:15pm *Restricted to students in Freshman Connection.*	Seats (Total: 34) ONLINE	

KNES289 **Topical Investigations**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: permission of department.

Contact department for information to register for this course.

KNES289L **Topical Investigations; Golf for Business and Life**

Credits: 3

Grading Method: Regular, Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Students must pay a $50.00 Facility fee. This course gives students the oppurtunity to learn the basics of the golf swing, etiquette, and most importantly, how to use golf as a business tool regardless of their chosen careers. Kinesiology majors may use this course to fulfill 2 credits of physical activity at intermediate level.

0101	Jeff Maynor	Seats (Total: 20)
	TuTh 3:30pm - 5:30pm	ESJ 2204

KNES289P **Topical Investigations; Mathematical & Physical Bases of Human Movement & Performance**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Knowledge in basic mathematics, physical laws, and statistics provide tools for kinesiologists and exercise scientists to quantify, analyze, and evaluate human movements for efficiency, effectiveness, and safety. This course is designed to provide students with knowledge and practices in basic mathematics, physics, and statistics specifically in relation to human movements and performance. Upon successful completion, this course is expected to better prepare students for the science Core courses required for Kinesiology majors (e.g., KNES300, KNES360, KNES370, and KNES385).

0101	Jae Kun Shim	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

KNES289R **Hoop Dreams: Black Masculinity and Sport**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHS, SCIS

Credit only granted for: KNES289R OR KNES225. Formerly: KNES289R.

Has sport disadvantaged African American males? This course critically examines sport as a site where notions of black masculinity are publicly debated, critiqued, challenged, celebrated, and also transformed. Utilizing an interdisciplinary approach, this course explores how sport has been invoked across the political and ideological spectrum to interrogate a number of issues impacting the life chances of young, African Americans males including educational attainment, poverty, social mobility, racism, cultural production, and notions of masculinity.

Has sport disadvantaged African American males? This course critically examines sport as a site where notions of black masculinity are publicly debated, critiqued, challenged, celebrated, and also transformed. Utilizing an interdisciplinary approach, this course explores how sport has been invoked across the political and ideological spectrum to interrogate a number of issues impacting the life chances of young, African Americans males including educational attainment, poverty, social mobility, racism, cultural production, and notions of masculinity.

0101	Ronald Mower MW 4:00pm - 5:15pm	Seats (Total: 50) ONLINE	

KNES289W **The Cybernetic Human**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS, SCIS

Credit only granted for: KNES289W OR KNES226. Formerly: KNES289W.

Can the profound and rapid technological advances experienced in the 21st century change what it means to be human or the nature of humanity? Emergent technologies, new materials, increased computer power, engineering innovations, and groundbreaking work in the sciences of cognition and action provide myriad opportunities for repairing and enhancing the human body and brain. Examines the ethical, social, and technological implications of an increasing synergism of technology and the body in sports and the arts, at work or home, rehabilitating the body and the brain, and society at large.

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0101	Tim Kiemel Class time/details on ELMs W 12:00pm - 12:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Tim Kiemel Class time/details on ELMs W 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

0103	Tim Kiemel Class time/details on ELMs W 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion
0104	Tim Kiemel Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	Discussion

KNES293 **History of Sport in America**

Credits: 3 | Grading Method: Regular, Pass-Fail | CORE: SH | General Education: DSHS

The growth and development of sport in America. The transformation of sport within the perspective of American history, including class sport, professionalization, amateurism, and international involvement.

Restricted to Majors or non-majors with less than or equal to 45 credits.

0101	Shannon Jette Class time/details on ELMs W 1:00pm - 1:50pm	Seats (Total: 22) ONLINE ONLINE	Discussion
0102	Shannon Jette Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 22) ONLINE ONLINE	Discussion
0103	Shannon Jette Class time/details on ELMs W 3:00pm - 3:50pm	Seats (Total: 22) ONLINE ONLINE	Discussion
0104	Shannon Jette Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
0105	Shannon Jette Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 22) ONLINE ONLINE	Discussion
0106	Shannon Jette Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 22) ONLINE ONLINE	Discussion

0107	Shannon Jette Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 22) ONLINE ONLINE	 Discussion
0108	Shannon Jette Class time/details on ELMs F 2:00pm - 2:50pm	Seats (Total: 22) ONLINE ONLINE	 Discussion
FC01	Brandon Wallace TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 34) ONLINE	

KNES300 **Biomechanics of Human Motion**

Credits: 4 Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in BSCI201. And 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115); or (must have completed one General Education: Fundamental Studies-Math course with a minimum grade of C-; and must have math eligibility of MATH140 or higher). Recommended: PHYS121. Restriction: Must be in a major within SPHL-Kinesiology department.

The study of human movement and the physical and physiological principles upon which it depends. Body mechanics, posture, motor efficiency, sports, the performance of a typical individual and the influence of growth and development upon motor performance.

Students must pay a $10 lab fee.

0101	Ross Miller Class time/details on ELMs Class time/details on ELMs	Seats (Total: 18) ONLINE ONLINE	 Lab
0102	Ross Miller Class time/details on ELMs Class time/details on ELMs	Seats (Total: 18) ONLINE ONLINE	 Lab
0103	Ross Miller Class time/details on ELMs Class time/details on ELMs	Seats (Total: 18) ONLINE ONLINE	 Lab

0104	Ross Miller	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0105	Ross Miller	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0106	Ross Miller	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0107	Ross Miller	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0108	Ross Miller	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

KNES300H **Biomechanics of Human Motion**

(Perm req)

Credits: 4

Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in BSCI201. And 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115); or (must have completed one General Education: Fundamental Studies-Math course with a minimum grade of C-; and must have math eligibility of MATH140 or higher). Recommended: PHYS121. Restriction: Must be in a major within SPHL-Kinesiology department.

The study of human movement and the physical and physiological principles upon which it depends. Body mechanics, posture, motor efficiency, sports, the performance of a typical individual and the influence of growth and development upon motor performance.

This section is restricted to students who have been admitted in the Kinesiology Honors program. Students must pay a $10 lab fee.

0101	Ross Miller	Seats (Total: 4)	
	MW 3:00pm - 4:15pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

KNES305 **Principles & Application of Exercise Rehabilitation**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI201 and BSCI202; and 1 course with a minimum grade of C- from (KNES300, KNES350, KNES360, KNES370, KNES385). Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES498T or KNES305. Formerly: KNES498T.

In-depth analysis of the basic principles of rehabilitation and exercise programming for common injuries encountered in a clinical setting. Basic assessment techniques, ranges of motion, muscular anatomy, rehabilitative protocols, and exercise modalities are a major focus.

0101	Larry Plotkin	Seats (Total: 34)
	TuTh 8:00am - 9:15am	SPH 1312

KNES306 Prosthetics for Limb Amputations

Credits: 3

Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in BSCI201, BSCI202, and KNES300. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES306 or KNES498W. Formerly: KNES498W.

Introduction to the science of prosthetics and the artificial devices that are designed, developed and fit to replace the missing body part or parts lost through trauma, disease or congenital conditions.

0101	Douglas Collier	Seats (Total: 34)
	Tu 8:00am - 10:30am	ONLINE

KNES320 Physiological Basis of Physical Activity and Human Health

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI201 and BSCI202. Restriction: Must be in Public Health Science program. Credit only granted for: KNES360 or KNES320.

A study of the responses and chronic adaptations to physical activity and exercise, with particular emphasis on the interaction between human health and physical activity. The laboratory component of course will focus on the assessment of physical activity and measurement of physiological adaptations to exercise. Students are expected to gain an understanding and appreciation for the benefits of physical activity and exercise in the context of public health.

Students must pay a $10.00 lab fee.

0101	Steven Prior	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to College Park students in the Public Health Science major.		
0102	Steven Prior	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to College Park students in the Public Health Science major.		
0103	Steven Prior	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to College Park students in the Public Health Science major.		
0104	Steven Prior	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to College Park students in the Public Health Science major.		
0105	Steven Prior	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to College Park students in the Public Health Science major.		
0106	Steven Prior	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to College Park students in the Public Health Science major.		
0107	Steven Prior	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to College Park students in the Public Health Science major.		
0108	Steven Prior	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to College Park students in the Public Health Science major.		

ESG1	Noah Gibson	Seats (Total: 22)	
	MW 12:00pm - 1:15pm	ONLINE	
	W 1:30pm - 3:20pm	ONLINE	Lab
	Restricted to Shady Grove students in the Public Health Science major.		

KNES332 **Exercise Testing & Prescription for Fitness Professionals**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES332 or KNES389G. Formerly: KNES389G.

Practical applications of exercise physiology and psychology to target fitness instruction for the general adult population Includes discussion of certification standards and professional development as well as evaluation of program safety and current trends.

0101	Jo Zimmerman	Seats (Total: 25)
	WF 8:00am - 9:50am	ONLINE

KNES332H **Exercise Testing & Prescription for Fitness Professionals**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES332 or KNES389G. Formerly: KNES389G.

Practical applications of exercise physiology and psychology to target fitness instruction for the general adult population Includes discussion of certification standards and professional development as well as evaluation of program safety and current trends.

0101	Jo Zimmerman	Seats (Total: 2)
	WF 8:00am - 9:50am	ONLINE

KNES350 **The Psychology of Sports & Exercise**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSHS

An exploration of personality factors, including but not limited to motivation, aggression and emotion, as they affect sports participation and motor skill performance.

0101	Elizabeth Brown TuTh 2:00pm - 3:15pm *This section is for KNES Majors Only.*	Seats (Total: 60) ONLINE
0102	Jay Goldstein TuTh 8:00am - 9:15am	Seats (Total: 90) ONLINE

KNES350H **The Psychology of Sports & Exercise**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

An exploration of personality factors, including but not limited to motivation, aggression and emotion, as they affect sports participation and motor skill performance.

This section is restricted to students who have been admitted in the Kinesiology Honors program.

0101	Elizabeth Brown TuTh 2:00pm - 3:15pm	Seats (Total: 3) ONLINE
0102	Jay Goldstein TuTh 8:00am - 9:15am	Seats (Total: 3) ONLINE

KNES360 **Physiology of Exercise**

Credits: 4 Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in BSCI202 and BSCI201; or permission of SPHL-Kinesiology department. Restriction: Must be in one of the following programs (Kinesiology; Public Health Science).

A study of the physiology of exercise, including concepts of work, muscular contraction, energy transformation, metabolism, oxygen debt, and nutrition and athletic performance. Emphasis on cardiovascular and respiratory function in relation to physical activity and training.

Students must pay a $10 lab fee.

0101	Sushant Ranadive	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in the Kinesiology major (code:08351).		

0102	Sushant Ranadive	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in the Kinesiology major (code:08351).		
0103	Sushant Ranadive	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in the Kinesiology major (code:08351).		
0104	Sushant Ranadive	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in the Kinesiology major (code:08351).		
0105	Sushant Ranadive	Seats (Total: 12)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0106	Sushant Ranadive	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in the Kinesiology major (code:08351).		
0107	Sushant Ranadive	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in the Kinesiology major (code:08351).		
0108	Sushant Ranadive	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in the Kinesiology major (code:08351).		

KNES360H **Physiology of Exercise**

(Perm req)

Credits: 4

Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in BSCI202 and BSCI201; or permission of SPHL-Kinesiology department. Restriction: Must be in one of the following programs (Kinesiology; Public Health Science).

A study of the physiology of exercise, including concepts of work, muscular contraction, energy transformation, metabolism, oxygen debt, and nutrition and athletic performance. Emphasis on cardiovascular and respiratory function in relation to physical activity and training.

This section is restricted to students who have been admitted in the Kinesiology Honors program. Students must pay a $10 lab fee.

0101	Sushant Ranadive MWF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 4) ONLINE ONLINE	 Lab

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KNES370 **Motor Development**

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department.

Motor development across the life span. The developmental sequences of motor skills from birth to old age; neuromaturation of neuromuscular system; analysis of the underlying mechanisms of motor skill development; and correlates of motor development.

0101	Tim Kiemel Class time/details on ELMs M 9:00am - 9:50am	Seats (Total: 18) ONLINE ONLINE	 Lab
0102	Tim Kiemel Class time/details on ELMs M 10:00am - 10:50am	Seats (Total: 18) ONLINE ONLINE	 Lab
0103	Tim Kiemel Class time/details on ELMs M 11:00am - 11:50am	Seats (Total: 18) ONLINE ONLINE	 Lab
0104	Tim Kiemel Class time/details on ELMs M 12:00pm - 12:50pm	Seats (Total: 18) ONLINE ONLINE	 Lab
0105	Tim Kiemel Class time/details on ELMs W 9:00am - 9:50am	Seats (Total: 18) ONLINE ONLINE	 Lab

0106	Tim Kiemel Class time/details on ELMs W 10:00am - 10:50am	Seats (Total: 18) ONLINE ONLINE	 Lab
0107	Tim Kiemel Class time/details on ELMs W 11:00am - 11:50am	Seats (Total: 18) ONLINE ONLINE	 Lab
0108	Tim Kiemel Class time/details on ELMs W 12:00pm - 12:50pm	Seats (Total: 18) ONLINE ONLINE	 Lab

KNES370H **Motor Development**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department.

Motor development across the life span. The developmental sequences of motor skills from birth to old age; neuromaturation of neuromuscular system; analysis of the underlying mechanisms of motor skill development; and correlates of motor development.

This section is restricted to students who have been admitted in the Kinesiology Honors program.

0101	Tim Kiemel MW 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 3) ONLINE ONLINE	 Lab

KNES385 **Motor Control and Learning**

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department.

Physiological and cognitive bases for motor control and their applications to the acquisition of movement skills and understanding of movement disorders. Topics include: neurophysiology, motor control theory, sensory/perceptual processes, perception-action coupling, information processing, memory, attention, individual differences, motivation, practice organization and role of feedback.

0101	Rodolphe Gentili MW 11:00am - 11:50am F 8:00am - 8:50am	Seats (Total: 18) ONLINE ONLINE	 Lab

0102	Rodolphe Gentili MW 11:00am - 11:50am F 9:00am - 9:50am	Seats (Total: 18) ONLINE ONLINE	 Lab
0103	Rodolphe Gentili MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 18) ONLINE ONLINE	 Lab
0104	Rodolphe Gentili MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 18) ONLINE ONLINE	 Lab
0107	Rodolphe Gentili MW 11:00am - 11:50am M 1:00pm - 1:50pm	Seats (Total: 18) ONLINE ONLINE	 Lab
0108	Rodolphe Gentili MW 11:00am - 11:50am M 2:00pm - 2:50pm	Seats (Total: 18) ONLINE ONLINE	 Lab

KNES385H **Motor Control and Learning**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department.

Physiological and cognitive bases for motor control and their applications to the acquisition of movement skills and understanding of movement disorders. Topics include: neurophysiology, motor control theory, sensory/perceptual processes, perception-action coupling, information processing, memory, attention, individual differences, motivation, practice organization and role of feedback.

This section is restricted to students who have been admitted in the Kinesiology Honors program.

0101	Rodolphe Gentili MW 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 8) ONLINE ONLINE	 Discussion

KNES389 **Topical Investigations**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: permission of instructor and department. This class does NOT fulfill a KNES Options Requirement.

Contact department for information to register for this course.

KNES389I **Topical Investigations; Sport Economics**

Credits: 3 Grading Method: Regular, Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: KNES287 with a C- or better. Examines sport as a diverse cultural form through which physical activity is organized, regulated, and consumed within contemporary society. Evaluation of the complex interactions between sport culture economic institutions and forces.

0101	Michael Friedman	Seats (Total: 32)
	MW 3:30pm - 4:45pm Class time/details on ELMs	CCC 1205 ONLINE

KNES389K **Topical Investigations; Kinesiology Internship**

(Perm req)

Credits: 3 Grading Method: Regular

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: permission of instructor and department.

Contact department for information to register for this course.

KNES400 **The Foundations of Public Health in Kinesiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES287. Restriction: Senior standing or higher; and must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES400 or KNES498A. Formerly: KNES498A.

An investigation of the role of physical activity and inactivity in relation to health and well-being through a public health perspective. Past and current perspectives on health promotion, health education, and social policies and approaches will be examined for various populations.

0101	Anna Posbergh	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

KNES400H **The Foundations of Public Health in Kinesiology**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES287. Restriction: Senior standing or higher; and must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES400 or KNES498A. Formerly: KNES498A.

An investigation of the role of physical activity and inactivity in relation to health and well-being through a public health perspective. Past and current perspectives on health promotion, health education, and social policies and approaches will be examined for various populations.

0101	Anna Posbergh	Seats (Total: 5)
	MWF 11:00am - 11:50am	ONLINE

KNES401 **Zip Code: Prediction on Physical Activity & Health**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in SPHL100. Restriction: Must have earned a minimum of 75 credits and must be in a major within, SPHL-Kinesiology department. Credit only granted for: KNES401 or KNES498A. Formerly: KNES498A.

An exploration of the relationship and impacts of built and other social environments on health, including physical activity, social equity, gentrification, and many others.

0101	Jennifer Roberts	Seats (Total: 30)
	W 2:00pm - 4:30pm	ONLINE

KNES440 **Psychology of Athletic Performance**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES498P, KNES689Z, or KNES440.

Examines the psychological factors, mechanisms, and processes in athletic performance. Utilizes a social psychological approach to focus on the study and review of individual performance in both the interpersonal and social context.

0101	Seppo Iso-Ahola M 4:00pm - 6:35pm	Seats (Total: 30) SPH 1312

KNES440H **Psychology of Athletic Performance**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES498P, KNES689Z, or KNES440.

Examines the psychological factors, mechanisms, and processes in athletic performance. Utilizes a social psychological approach to focus on the study and review of individual performance in both the interpersonal and social context.

This section is restricted to students who have been admitted in the Kinesiology Honors program.

0101	Seppo Iso-Ahola M 4:00pm - 6:35pm	Seats (Total: 3) SPH 1312

KNES445 **Exercise and Brain Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES498C or KNES445. Formerly: KNES498C.

Examines the evidence for exercise to affect brain function and brain health in children, in adults, and in old age. Covers the adaptations to acute and chronic exercise within brain networks related to emotion, stress reactivity, memory, and executive function, and the effectiveness of physical activity and exercise as treatments for depression, anxiety disorders, and cognitive impairment.

0101	J Carson Smith TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 30) ESJ 2212 ONLINE

KNES445H **Exercise and Brain Health**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES498C or KNES445. Formerly: KNES498C.

Examines the evidence for exercise to affect brain function and brain health in children, in adults, and in old age. Covers the adaptations to acute and chronic exercise within brain networks related to emotion, stress reactivity, memory, and executive function, and the effectiveness of physical activity and exercise as treatments for depression, anxiety disorders, and cognitive impairment.

0101	J Carson Smith TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 3) ESJ 2212 ONLINE

KNES451 **Children and Sport: A Psychosocial Perspective**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.

Examination of youth sports from a psychosocial perspective, including the impact of highly structured sports on young athletes and the complex social network of coaches, parents and peers.

0101	Elizabeth Brown TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE

KNES451H **Children and Sport: A Psychosocial Perspective**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.

Examination of youth sports from a psychosocial perspective, including the impact of highly structured sports on young athletes and the complex social network of coaches, parents and peers.

0101	Elizabeth Brown TuTh 11:00am - 12:15pm	Seats (Total: 1) ONLINE

KNES457 **Managing Youth Programs: Educational, Fitness and Sport**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES350 and KNES370. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES457 or KNES498Y.

An examination of the basic functions involved in managing physical education, fitness, and youth sports programs. Focus on leadership skills, organizational management, and techniques for applying learned skills in a variety of organizational settings that serve the nation's youth.

0101	Jay Goldstein	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ONLINE

KNES464 **Exercise Metabolism: Role in Health and Disease**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES464 or KNES498L.

Examines the role of metabolism in kinesiology, especially as it relates to physical inactivity, health and disease. Includes bioenergetics, substrate utilization, cell signaling, and metabolic gene expression and their impact on chronic health conditions or disease.

Prerequisite: KNES360 with a C- or better

0101	Sarah Glancy	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

KNES464H **Exercise Metabolism: Role in Health and Disease**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES464 or KNES498L.

Examines the role of metabolism in kinesiology, especially as it relates to physical inactivity, health and disease. Includes bioenergetics, substrate utilization, cell signaling, and metabolic gene expression and their impact on chronic health conditions or disease.

Prerequisite: KNES360 with a C- or better

0101	Sarah Glancy	Seats (Total: 3)
	TuTh 9:30am - 10:45am	ONLINE

KNES465 **Physical Activity and Disease Prevention and Treatment**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (KNES320, KNES360). Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES465 or KNES498A.

Critically examines the scientific evidence that supports the use of physical activity to prevent and treat age-related diseases, including cardiovascular disease, diabetes, abnormal lipoprotein-lipid levels, hypertension, obesity, osteoporosis and cancer.

0101	Sushant Ranadive	Seats (Total: 32)
	MWF 10:00am - 10:50am	ONLINE

KNES465H **Physical Activity and Disease Prevention and Treatment**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (KNES320, KNES360). Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES465 or KNES498A.

Critically examines the scientific evidence that supports the use of physical activity to prevent and treat age-related diseases, including cardiovascular disease, diabetes, abnormal lipoprotein-lipid levels, hypertension, obesity, osteoporosis and cancer.

0101	Sushant Ranadive	Seats (Total: 3)
	MWF 10:00am - 10:50am	ONLINE

KNES476 **Honors Thesis Proposal**

(Perm req)

Credits: 3 Grading Method: Regular

Corequisite: KNES478. Restriction: Must be a KNES Honors student; and senior standing. Credit only granted for: KNES476 or KNES498R.

Development of honors thesis proposal based on preliminary research and literature review. Presentation of formal proposal to the thesis committee and fellow honors students.

0101	Tim Kiemel	Seats (Total: 10)
	F 10:00am - 10:50am	ONLINE
	Class time/details on ELMs	ONLINE

KNES478 **Honors Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Guided discussion of research topics of current interest.

Continuing KNES Honors Students must enroll in KNES478 every semester they are in the program.

0101	Tim Kiemel	Seats (Total: 20)
	F 11:00am - 11:50am	ONLINE

KNES483 **Sport Marketing and Media**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in KNES287. Recommended: KNES355. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.

Industry practices in sport marketing and media. Marketing strategies and consumer behavior in different sport contexts. Critical examination of selected social and economic issues related to the buying and selling of sport.

0101	Stephen McDaniel	Seats (Total: 28)
	TuTh 11:00am - 12:15pm	ONLINE

KNES483H **Sport Marketing and Media**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in KNES287. Recommended: KNES355. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.

Industry practices in sport marketing and media. Marketing strategies and consumer behavior in different sport contexts. Critical examination of selected social and economic issues related to the buying and selling of sport.

0101	Stephen McDaniel	Seats (Total: 3)
	TuTh 11:00am - 12:15pm	ONLINE

KNES485 **Sport and Globalization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVUP

Prerequisite: Minimum grade of C- in KNES287. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.

Examination of sport culture from a global perspective; focuses on theorizing the similarities and differences between various national sporting cultures.

0101	Ronald Mower Class time/details on ELMs Class time/details on ELMs	Seats (Total: 50) ONLINE ONLINE

KNES497 **Kinesiology Senior Seminar**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

Prerequisite: A professional writing course with a minimum grade of C-; and must have completed 6 KNES core courses and 2 KNES option courses, all with a C- or higher; and must have completed STAT100 with a C- or better. Restriction: Senior standing or higher; and must be in Kinesiology program; and permission of department.

Discussions of contemporary issues vital to the discipline, critiques of research in the student's area/areas of special interest, completion of a major project where the student will be asked to demonstrate the ability to carry out investigative processes in problem solving and critical writing under faculty direction.

Students may not be eligible to add or change their section if they did not attend class during schedule adjustment.

Click here for more information.

0102	Ronald Mower Class time/details on ELMs *Historicizing Modern Sport, Physical Education, and Physical Culture.*	Seats (Total: 20) ONLINE
0103	James Hagberg Th 8:00am - 10:30am *Physical Activity and the Obesity and Diabetes Epidemic*	Seats (Total: 20) ONLINE
0106	Joanne Klossner TuTh 12:30pm - 1:45pm *Hot Topics in Sports Medicine.*	Seats (Total: 20) ONLINE
0110	Jay Goldstein Tu 4:00pm - 6:45pm *Applied Sport and Exercise Psychology for Practitioners.*	Seats (Total: 20) ONLINE
0113	Rodolphe Gentili W 2:00pm - 4:30pm *Rehabilitation and Motor Control.*	Seats (Total: 20) ONLINE

KNES498 **Special Topics in Kinesiology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

This class does NOT fulfill a KNES Options Requirement.

Contact department for information to register for this course.

KNES498Q **Special Topics in Kinesiology; Quantitative Methods in Cognitive Motor Behavior**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

Restriction: Must have earned a minimun of 75 credits. This is an introductory MATLAB course for beginners or persons with little or no background in programming. This course teaches computer programming and basic quantitative techniques for time-series data including various examples from multiple fields (but not limited to) such as cognitive motor neuroscience, biomechanics, bioengineering, psychology, biology, signal processing, etc. MATLAB is a very popular computer programming language and tool for algorithm development, numeric computation, as well as data analysis and visualization. One of the goals of this courseis to allow students with little or no background in computer programming to gain a proficiency in programming that will enable them to fully engage in algorithm development as well as data processing and visualization along with an introduction of some basic techniques for time-series analysis.

0101	Hyuk Oh	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

KNES498V **Special Topics in Kinesiology; Clinical Biomechanics: Musculoskeletal Injury**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

Prerequisite: Minimum grade of C- in KNES300. Restriction: Must have earned a minimum of 75 credits. Students will explore the mechanical bases of musculoskeletal injury to better understand the biomechanical mechanisms involved in causing the injury, the effect of injury on musculoskeletal tissue, and ultimately, based on our current knowledge, how injuries might be prevented.

0101	Jae Kun Shim	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

KNES600 **Kinesiology in Public Health**

Credits: 3 Grading Method: Regular, Audit

A broad introduction to public health within the context of the discipline of kinesiology, focusing on furthering the understanding of the ways kinesiology contributes toward achieving the goals of public health.

0101	Jennifer Roberts Tu 4:00pm - 6:30pm	Seats (Total: 15) ONLINE

KNES609 **Research Issues in Kinesiology**

(Perm req)

Credits: 1 Grading Method: Regular

Issues, methodologies, and critical analyses of current research in Kinesiology.

Contact department for information to register for this course.

KNES618 **Current Readings in Exercise and Applied Physiology**

Credits: 1 Grading Method: Regular, Audit

Student-led presentations of contemporary literature in the areas of genetics, exercise science, fitness and health. Emphasis on papers describing new research findings, novel techniques, innovative methods, and emerging issues.

0101	James Hagberg F 1:00pm - 1:50pm	Seats (Total: 12) ONLINE

KNES630 **Sociology of Sport in Contemporary Perspective**

Credits: 3 Grading Method: Regular, Audit

Studies social organization and the role of individuals and groups in sport situations: the interrelationship of sport with traditional social institutions; sport as a sub-system and its structure; and sport and social problems.

0101	David Andrews M 4:00pm - 6:30pm	Seats (Total: 15) ONLINE

KNES645 **Exercise and Brain Health**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in KNES350; or students who have taken courses with comparable content may contact the department. Credit only granted for: KNES645 or KNES689X. Formerly: KNES689X.

Examines the evidence for exercise to affect brain function and brain health in children, in adults, and in old age. Covers the adaptations to acute and chronic exercise within brain networks related to emotion, stress reactivity, memory, and executive function, and the effectiveness of physical activity and exercise as treatments for depression, anxiety disorders, and cognitive impairment.

0101	J Carson Smith	Seats (Total: 3)
	TuTh 2:00pm - 3:15pm Class time/details on ELMs	ESJ 2212 ONLINE

KNES660 **Psychology of Athletic Performances**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: KNES350. Credit only granted for: KNES660 or KNES689Z. Formerly: KNES689Z.

Psychological factors, mechanisms, and processes in athletic performance. The basic approach is social psychological, according to which the focus is on individual performance in the interpersonal athletic context. Intrapersonal and interpersonal factors and their effects on athletic performance. Psychology of peak performance, choking, and errors of mental control. Analysis of the general principles and types of mental training.

0101	Seppo Iso-Ahola	Seats (Total: 30)
	M 4:00pm - 6:35pm	SPH 1312

KNES678 **Professional Seminar for Teacher Development in Physical Education; Professional Seminar for Teacher Development in Physical Education**

Credits: 1-3 Grading Method: Regular, Audit

The spring seminar course is an extension of the fall seminar course and spring internship course. It accompanies a full time undergraduate level teaching internship and is intended to support and extend students' field experience learning. The spring seminar course is designed to continue to provide students with the support they need to successfully meet the College of Education's Middle School Mathematics and Science programmatic requirements and the Maryland State Department of Education's Middle School Mathematics and Science Teacher Certification Requirements. These requirements include demonstrating mastery on all of the College of Education's Foundational Competencies (FCCs) and Performance Based Assessments (PBAs) and the national edTPA, InTASC, and AMLE Standards.

IH60	Cara Grant	Seats (Total: 15)
	M 4:00pm - 6:30pm	ONLINE

KNES689 **Special Problems in Kinesiology**

(Perm req)

Credits: 1-6 Grading Method: Regular

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

KNES689A **Special Problems in Kinesiology; Assessing Learning in Physical Education**

Credits: 3 Grading Method: Regular, Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

A study of the principles and techniques of educational measurement used to evaluate student learning in the cognitive, psychomotor and affective domains within the context of teaching effectiveness. Students will develop research proposals for implementation during the second half of their teaching internship.

Contact department for information to register for this course.

KNES689I **Special Problems in Kinesiology; PCS Teaching Secondary Physical Education**

Credits: 3 Grading Method: Regular, Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

KNES689Q **Special Problems in Kinesiology; Clinical Biomechanics: Musculoskeletal Injury**

Credits: 3 Grading Method: Regular, Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

0101	Jae Kun Shim	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

KNES689R **Special Problems in Kinesiology; Quantitative Methods in Cognitive Motor Behavior**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

0101	Hyuk Oh	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

KNES689T **Special Problems in Kinesiology; Teaching Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

Outreach Secondary MCERT- KNES. Departmental permission required. Students are required to pay a course fee; refer to program materials for details.

Contact department for information to register for this course.

KNES778 **Internship in Physical Activity and Public Health**

Credits: 1-4 Grading Method: Regular

The internship is a time-limited, supervised period of public/community health activities carried out in a health or allied health organization involved with physical activity. Students gain practical experience in areas such as program planning and implementation, program evaluation, public policy analysis, research, and management.

0101	Shannon Jette	Seats (Total: 5)
	Contact instructor or department for details.	

KNES786 **Capstone Project in Physical Activity and Public Health**

Credits: 3 Grading Method: Regular

Prerequisite: KNES600, KNES601, and KNES602.

The culminating experience in which the student applies knowledge and skills learned in the MPH program to conduct independent work on a physical activity problem under the supervision of a faculty advisor.

0101	Andrea Liberto, Shannon Jette	Seats (Total: 5)
	Contact instructor or department for details.	

KNES789 **Advanced Projects in Kinesiology**

(Perm req)

Credits: 1-3 Grading Method: Regular

Advanced projects examining current problems and trends in kinesiology.

Contact department for information to register for this course.

KNES799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

KNES898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

KNES899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

KORA Korean Fall 2020

KORA101 **Elementary Korean I**

Credits: 3 Grading Method: Regular

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score; and permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must be a non-Heritage student with no background in Korean.

Introduction to the Korean language. Primary emphasis on oral skills, but Hangul, the Korean alphabet, will also be introduced.

0101	Seong Minne Koh MWF 10:00am - 10:50am	Seats (Total: 20) ONLINE
0201	Seong Minne Koh MWF 2:00pm - 2:50pm	Seats (Total: 20) ONLINE

KORA201 **Intermediate Korean I**

Credits: 3 Grading Method: Regular CORE: HO

Prerequisite: KORA102; or permission of instructor.

An intermediate-level course designed for non-Heritage students. It begins the second year of instruction in the University's two-track Korean Program.

0101	Seong Minne Koh MWF 1:00pm - 1:50pm	Seats (Total: 15) ONLINE
0201	Seong Minne Koh MWF 11:00am - 11:50am	Seats (Total: 15) ONLINE

KORA398C **Special Topics in Korean Studies; Intro to Korean Civilization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of particular aspect of Korean language, literature, and/or culture. Topic and language of instruction to be announced when course is offered.

This is a CIC courseshare course. The instructor, Professor Juhn Ahn, is at the University of Michigan, but UMD students enroll and receive it at UMD. In order to better understand the resurgence of Korean films in recent years and the critical acclaim that they received domestically and globally, this course will examine representative films, directors, and genres during the last hundred years in South Korea. We will explore different genres of historical drama, melodrama, literary adaptation, horror, mystery, and monster films, and will discuss topics pertaining to family, sexuality, gender, cultural tradition, national identity, social movement, and urbanization. We will also pay particular attention to the historical context of films, and how artistic assertion and negotiation of the time are reflected in their final cut.

0101	Instructor: TBA MW 2:30pm - 4:00pm	Seats (Total: 10) ONLINE

KORA398E **Special Topics in Korean Studies; The Koreas: Korean War to the 21st Century**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of particular aspect of Korean language, literature, and/or culture. Topic and language of instruction to be announced when course is offered.

This is a CIC courseshare course. The instructor, Professor Charles Kim, is at the University of Wisconsin, Madison, but UMD students enroll and receive it at UMD. Korea has always been part and parcel of key trends and phenomena in East Asia and the world. Students who take this course will explore the transformations, the setbacks, and the dynamism that have characterized modern Korean history, with a focus on post-1945 South Korea and North Korea. By exploring society and culture, we will delve into the resilience of Korean people as they lived through a turbulent history marked by national divisions and the Korean War, Cold War-era development and competition, democratization, and popular memory and nostalgia.

0101	Instructor: TBA	Seats (Total: 10)
	TuTh 12:00pm - 1:15pm	ONLINE

KORA499 **Independent Study Korean**

(Perm req)

Credits: 1-3 Grading Method: Regular

Independent study under faculty supervision.

Contact department for information to register for this course.

LARC Landscape Architecture Fall 2020

LARC141 **Design Fundamentals Studio**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: LARC140. Recommended: Concurrently enrolled in LARC263. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department; and sophomore standing or higher; and must be in Landscape Architecture program.

Fundamentals of basic design focusing on creative problem solving associated with landscape architecture.

Face-to-face meetings required on specific dates. See instructor for details.

0101	Christopher Ellis	Seats (Total: 15)	
	MW 2:00pm - 3:15pm	ONLINE	
	MW 3:30pm - 4:50pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

LARC151 **Urban Agriculture: Designing and Assessing Edible Landscapes**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

Students will examine the growing development of urban agriculture and edible landscapes. Urban agriculture has seen a recent growth and interest in cities across the globe. From Paris to New York, from Baltimore to Detroit, urban agriculture is an emerging land use to address a variety of needs. Redevelopment, food deserts, community engagement and environmental justice are just some of the issues and topics that are connected to the recent growth of urban agriculture. This course will take a critical examination of urban agriculture's contribution to the food system, its input and outputs in the urban landscape, and the planning and design of urban agriculture and edible landscapes.

0101	Kelley Oklesson MW 11:00am - 11:50am M 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Kelley Oklesson MW 11:00am - 11:50am M 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0103	Kelley Oklesson MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0104	Kelley Oklesson MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0105	Kelley Oklesson MW 11:00am - 11:50am M 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0107	Kelley Oklesson MW 11:00am - 11:50am M 4:00pm - 4:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
FC01	Eric Samet-Shaw, Amy Sametshaw MW 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 25) ONLINE	

LARC160 **Introduction to Landscape Architecture and Environmental Design**

Credits: 3 | Grading Method: Regular | CORE: HO | General Education: DSHU, DSSP

History, theory, philosophy and current practice of the profession of landscape architecture. Explores the interactive relationship between humans and their environment by examining people's perceptions of and changing attitude towards the landscape, as well as, an examination of how these are related to ecological and cultural influences. Topics include urban, ecological, community and creative design.

0101	Dennis Nola MW 12:00pm - 12:50pm M 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Dennis Nola MW 12:00pm - 12:50pm M 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0104	Dennis Nola MW 12:00pm - 12:50pm M 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0105	Dennis Nola MW 12:00pm - 12:50pm W 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0106	Dennis Nola MW 12:00pm - 12:50pm W 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0107	Dennis Nola MW 12:00pm - 12:50pm M 4:00pm - 4:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
FC01	Colleen Vacelet MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE	

LARC265 **Site Analysis and Ecological Principles**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: LARC141. Corequisite: LARC240 and LARC221. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department; and sophomore standing or higher; and must be in Landscape Architecture program. Credit only granted for: LARC265 or ARCH460.

Principles and methods of site analysis with an emphasis on the application of ecological principles in landscape architecture, architecture and planning.

0101	Thomas Mateya	Seats (Total: 20)	
	TuTh 9:30am - 10:45am	ONLINE	

LARC320 **Principles of Site Engineering**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: LARC221. Corequisite: LARC340. Restriction: Must be in Landscape Architecture program; and junior standing or higher.

The study and application of landscape construction principles as applied to grading, drainage, site layout, storm water management, and vehicular and pedestrian circulation.

Face-to-face meetings required on specific dates. See instructor for details.

0101	Phillip Cho	Seats (Total: 20)	
	Th 8:00am - 10:45am	ONLINE	
	Tu 9:30am - 10:45am	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

LARC340 **Site Planning and Design Studio**

(Perm req)

Credits: 5 Grading Method: Regular

Prerequisite: LARC221; and LARC240; and LARC265. Corequisite: LARC320. Restriction: Must be in Landscape Architecture program; and junior standing or higher.

An examination of the influence of landscape character and site features (natural and cultural) on landscape architecture, architecture and planning through application in the studio setting.

Face-to-face meetings required on specific dates. See instructor for details.

0101	Dennis Nola	Seats (Total: 17)	
	MW 1:00pm - 1:50pm	ONLINE	
	MW 2:00pm - 4:50pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

LARC389 **Internship in Landscape Architecture**

(Perm req)

Credits: 3 Grading Method: Regular

A supervised internship where students earn credit for work experience related to their career goals. Each student must keep a work log, work on a special project, and produce a report related to this project. An evaluation from the external supervisor of the project is required. Participation requires application to the internship advisor in the preceding semester.

There will be two required real-time sessions, time to be determined. A supervised internship where students earn credit for work experience related to their career goals. Each student must keep a work log, work on a special project, and produce a report related to this project. An evaluation from the external supervisor of the project is required. Participation requires application to the internship advisor in the preceding semester.

0101	Mark Carroll	Seats (Total: 15)
	Meets July 8, 2020 - November 18, 2020	
	Class time/details on ELMs	ONLINE

LARC420 **Professional Practice**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: LARC321. Restriction: Must be in Landscape Architecture program.

An introduction to and comparative study of the professional concerns of design firms. Focus on planning, legal, ethical, marketing and management considerations of interdisciplinary practices.

0101	JoAnn Trach Tongson	Seats (Total: 30)
	Tu 9:30am - 12:15pm	ONLINE

LARC440 **Urban Design Studio**

(Perm req)

Credits: 5 Grading Method: Regular

Prerequisite: LARC321; and LARC340; and LARC341. Restriction: Must be in Landscape Architecture program.

The landscape architect's role within the interdisciplinary urban design process, focusing on urban site design issues. Pedestrian friendly site design and the future of sustainable development will be studied.

Face-to-face meetings required on specific dates. See instructor for details.

0101	Jack Sullivan	Seats (Total: 17)	
	MW 1:00pm - 1:50pm	ONLINE	
	MW 2:00pm - 4:50pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

LARC452 **Green Infrastructure and Community Greening**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC100 or PLSC101; or permission of instructor. Restriction: Junior standing or higher. Credit only granted for: LARC489G or LARC452. Formerly: LARC489G.

A critical look and exploration of green infrastructure (GI) elements in the built environment in contributing to ecosystems services and the sustainability of the built environment. The course explores the science, issues, challenges, and the policy, planning and design solutions offered by green infrastructure.

0101	David Myers	Seats (Total: 20)
	W 10:00am - 10:50am	ONLINE
	F 10:00am - 11:50am	ONLINE
	for LARC majors only or permission of instructor	

LARC470 **Landscape Architecture Seminar**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: LARC321; and LARC341. Corequisite: LARC440. Restriction: Senior standing; and must be in Landscape Architecture program.

A combination of self-directed study, seminar, and lecture formats. An introduction to aspects of research methods, critical analysis, and proposal writing with a focus on urban and community design.

0101	Benjamin Tauber	Seats (Total: 13)
	M 9:00am - 11:50am	ONLINE

LARC489R **Special Topics in Landscape Architecture; Fundamental Graphics**

(Perm req)

Credits: 3 Grading Method: Regular

Credit according to time scheduled and organization of course. A lecture and/or studio course organized as an in-depth study of a selected specialization of landscape architecture not covered by existing courses.

Face-to-face meetings required on specific dates. See instructor for details.

0101	James Westwater	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	ONLINE	
	TuTh 12:30pm - 1:45pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

LARC499 **Independent Studies in Landscape Architecture**

(Perm req)

Credits: 1-4 Grading Method: Regular

Independent studies in landscape architecture including field, studio or library research under the direction of a faculty member.

Contact department for information to register for this course.

LARC620 **Graphic Tools for Landscape Representation**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Corequisite: LARC640. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

This course integrates digital and analog methods of communication and provides an introduction to computer tools and techniques commonly used in landscape architecture practice. Non-drafting computer tools will be used to orient basic digital image capture, manipulation, and presentation formatting. Also includes techniques and application of various media for graphic communication associated with landscape architecture.

Face-to-face meetings required on specific dates. See instructor for details.

0101	James Westwater	Seats (Total: 10)	
	TuTh 8:00am - 9:15am	ONLINE	
	TuTh 9:30am - 10:45am	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab

Alternating face-to-face/online class meeting. Please see instructor fo details.

LARC640 **Graduate Studio I**

(Perm req)

Credits: 5 Grading Method: Regular, Audit

Corequisite: LARC620. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

Principles and techniques of design as applied to shaping the landscape; developing concepts in visual thinking, environmental awareness, and design intervention through studio exercises and projects.

Face-to-face meetings required on specific dates. See instructor for details.

0101	Naomi Sachs	Seats (Total: 10)	
	TuTh 1:00pm - 1:50pm	ONLINE	
	TuTh 2:00pm - 4:50pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

LARC642 **Graduate Studio III**

(Perm req)

Credits: 5 Grading Method: Regular, Audit

Prerequisite: LARC641. Corequisite: LARC670. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

A focus on the interaction of landscape science (hydrology, geology, etc.) with the necessities and mechanisms of human settlements (transportation, economics, etc.) emphasizing innovative and forward thinking solutions to urbanization and ecological problems. It will apply this knowledge to landscape analysis, recreational planning and design, and community development, emphasizing resource management, spatial organization, landscape character, and the physical and social structure of community services. This course will be required for both Trach 1 and Track 2 students.

Face-to-face meetings required on specific dates. See instructor for details.

0101	David Myers	Seats (Total: 10)	
	TuTh 1:00pm - 1:50pm	ONLINE	
	TuTh 2:00pm - 4:50pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

LARC670 **Landscape Architecture Theory and Criticism**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

Review and analysis of the body of literature concerning landscape architecture and relationships between humans and both natural and designed environments. Topics may include: rationalism, ethics, aesthetics, social and economic values, postmodernism, feminist, multiculturalism, ecological determinism, preservation/conservation, and sustainability and ecological design. Each week students will lead a debate and discussion on a theoretical issue based on the assigned readings for that week.

0101	Benjamin Tauber	Seats (Total: 10)	
	M 9:00am - 11:50am	ONLINE	

LARC699 **Independent Studies in Landscape and Architecture**

(Perm req)

Credits: 1-3 Grading Method: Regular

Individual Instruction course.

Contact department for information to register for this course.

LARC721 **Landscape Construction Methods and Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LARC720. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

Basic methods of constructing landscapes and manipulating the appropriate plant and inorganic materials for the creation of ecologically sustainable environments for human use. An examination of the use, properties, and detailing of materials used in landscape construction.

Face-to-face meetings required on specific dates. See instructor for details.

0101	John Wray IV	Seats (Total: 10)	
	W 8:00am - 9:15am	ONLINE	
	W 9:30am - 10:45am	ONLINE	
	Contact instructor or department for details.		
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

LARC748 **Advanced Special Topics Studio**

Credits: 5 Grading Method: Regular, Audit

Advanced special topics comprehensive landscape architecture studio-exploration will focus on cultural, behavioral and ecological issues in the physical planning and design of urban landscapes.

Face-to-face meetings required on specific dates. See instructor for details.

0101	Byoung-Suk Kweon	Seats (Total: 10)	
	TuTh 1:00pm - 1:50pm	ONLINE	
	TuTh 2:00pm - 4:50pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

LARC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Development of a terminal thesis on a problem in landscape architecture, designed to demonstrate comprehensive skills and knowledge achieved in the graduate program. The subject will be selected in consultation with an advisor and periodically reviewed with a committee headed by the advisor.

Contact department for information to register for this course.

LASC Certificate in Latin American Studies Fall 2020

LASC234 **Issues in Latin American Studies I**

Credits: 3 | Grading Method: Regular | CORE: HO, D | General Education: DSHS, DSHU, DVUP

Cross-listed with SPAN234, PORT234. Credit only granted for: LASC234, PORT234, or SPAN234.

Interdisciplinary study of major issues in Latin America and the Caribbean, including Latin America's cultural mosaic, migration and urbanization. Democratization and the role of religions. Taught in English.

0101	Sarah Dowman TuTh 3:30pm - 4:45pm	Seats (Total: 30) ONLINE
0201	Sarah Dowman TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE

LASC234H **Issues in Latin American Studies I**

Credits: 3 | Grading Method: Regular | CORE: HO, D | General Education: DSHS, DSHU, DVUP

Cross-listed with SPAN234, PORT234. Credit only granted for: LASC234, PORT234, or SPAN234.

Interdisciplinary study of major issues in Latin America and the Caribbean, including Latin America's cultural mosaic, migration and urbanization. Democratization and the role of religions. Taught in English.

0101	Sarah Dowman TuTh 3:30pm - 4:45pm	Seats (Total: 5) TWS 0214

LASC248B **Special Topics in Latin American Studies; Environmental Crisis in Latin America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Topics to be announced when offered.

Cross-listed with PORT228D. Credit granted for PORT228D or LASC248B. How does the expansion of global capitalism impact environmental crises in Latin America? How have Latin American artists and activists re-imagined our relationship to the natural world? How local grass-roots organizations in Latin America and international NGO's fight for environmental justice? This course draws on a diverse range of cultural production including, theroy, documentaries, film, and fiction to respond to these questions. Students will also engage directly with international environmental organizations in the DC area and Latin American grass-roots leadership.

0101	Thayse Lima	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

LASC250 **History of Colonial Latin America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

Cross-listed with HIST250. Credit only granted for: LASC250 or HIST250.

Introductory survey of the history of Latin America from pre-Columbian Indian cultures to the beginning of the wars for independence (ca. 1810), covering cultural, political, social, and economic developments. Major themes include conquest, colonialism, indigenous culture, African slavery, religion, race and ethnicity, and gender ideologies.

0101	Alejandro Caneque	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	CHM 1407

LASC286 **Internship in Latin American/Caribbean Studies**

(Perm req)

Credits: 1-6 | Grading Method: Regular, Pass-Fail

Prerequisite: LASC234, SPAN234, LASC235, SPAN235, LASC250, HIST250, LASC251, or HIST251; and permission of Latin American Studies Center required. Restriction: Minimum cumulative GPA of 2.5; and cannot have more than 60 credits total. Additional information: The course is primarily intended for students seeking the Certificate in Latin American Studies, but exceptions will be considered for students with educational or career interests which lie in this area. Student internships must be approved by the Director and students must secure an appropriate faculty mentor to supervise the internship course.

Internship experience with an organization that works with or studies Latin American and/or the Caribbean. This is an experiential learning course that provides semester-long training that enriches the student's academic field of study and the LASC Certificate. Students submit a final written report of how the experience ties into their major field of study.

Contact department for information to register for this course.

LASC348C **Special Topics in Latin American Studies; Digital Publishing with Minimal Computing: Humanities at a Global Scale**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics to be announced when offered.

Cross-listed with CMLT398M, ENGL378M, and MITH301. Credit granted for MITH301, CMLT398M, ENGL378M, or LASC348C.

0101	Raffaele Viglianti	Seats (Total: 15)
	W 12:00pm - 1:50pm	ONLINE
	F 12:00pm - 12:50pm	ONLINE

LASC448N **Special Topics in Latin American Studies; Living with Pachamama: Religion and Ritual in the Andes from the Incas to the Present**

Credits: 3 Grading Method: Regular

Intensive study of a selected topic related to Latin American Studies.

Cross-listed with AMST428N, HIST428N, and RELS429N. Credit granted for HIST428N, AMST428N, LASC448N, or RELS429N.

0101	James Maffie	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ONLINE

LASC458 **Senior Capstone Course in Latin American Studies**

Credits: 3 Grading Method: Regular

Capstone course for advanced students in the Latin American Studies Certificate Program or other students with appropriate preparation. Interdisciplinary topics will vary each semester.

0101	Lisa Carney	Seats (Total: 10)
	TuTh 9:30am - 10:45am	ONLINE

LASC486 **Internship in Latin American/Caribbean Studies**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail

Prerequisite: Student must have completed at least two LASC courses, one of which must be a required/core course (LASC/SPAN234, LASC/SPAN235, LASC/HIST250, or LASC/HIST251); and permission of Latin American Studies Center required. Restriction: Minimum cumulative GPA of 2.5; and must have earned a minimum of 60 credits. Additional information: The course is primarily intended for students seeking the Certificate in Latin American Studies, but exceptions will be considered for students with educational or career interests which lie in this area. Student internships must be approved by the Director, and students must secure an appropriate faculty mentor for the internship course. An internship course will be approved only if a faculty supervisor is available.

Internship experience with an organization that works with or studies Latin American and/or the Caribbean. This is an experiential learning course that provides semester-long training that enriches the student's academic field of study and the LASC Certificate. Students submit a final written report of their experience, including critical analysis of the institutional relevance to their major field of study and to Latin American Studies. Students will also be asked to give an oral presentation.

Contact department for information to register for this course.

LATN Latin Fall 2020

LATN101 **Elementary Latin I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Additional information: A student who has two units of Latin in high school may register for LATN101 for the purposes of review, but ordinarily not for credit.

0101	Eugenia Lao	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

LATN102 **Elementary Latin II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed LATN101 at University of Maryland, College Park; or permission of ARHU-Classics department.

0101	Gregory Bucher	Seats (Total: 15)
	MWF 10:00am - 10:50am	ONLINE
	F 9:00am - 9:50am	ONLINE

LATN388A **Special Topics in Latin Language and Literature; Latin Verse Inscriptions**

Credits: 3 Grading Method: Regular

Readings in Latin at the intermediate level.

We will read Latin verse inscriptions, many of which are funerary. They are by turns moving and amusing, and reflect a social stratum often well below that of the major literary authors normally encountered by undergraduates, and are thus extremely important for Roman social history. This course has three components, therefore: Latin reading, social history, and epigraphy, i.e., the study of (Latin) inscriptions. Primary readings are in Latin.

0101	Gregory Bucher	Seats (Total: 10)
	MW 3:30pm - 4:45pm	ONLINE

LATN472 **Historical Development of the Latin Language**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: LATN472 or LING431.

An analysis of the development of the Latin language from archaic times to the Middle Ages.

0101	Katherine Wasdin	Seats (Total: 5)
	M 5:00pm - 7:40pm	ONLINE

LATN488J **Latin Readings; LUCAN**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The reading of one or more selected Latin authors from antiquity through the Renaissance. Reports.

0101	Francisco Barrenechea	Seats (Total: 5)
	W 5:00pm - 7:40pm	ONLINE

LATN499 **Independent Study in Latin Language and Literature**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

LATN672 **Historical Development of the Latin Language**

Credits: 3 Grading Method: Regular, Audit

An analysis of the development of the Latin language from the archaic period to the Middle Ages.

0101	Katherine Wasdin M 5:00pm - 7:40pm	Seats (Total: 7) ONLINE

LATN688J **Special Topics in Latin Literature; Lucan**

Credits: 3 Grading Method: Regular, Audit

0101	Francisco Barrenechea W 5:00pm - 7:40pm	Seats (Total: 7) ONLINE

LATN699 **Independent Studies in Latin Literature**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

LATN799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

LBSC Library Science Fall 2020

LBSC602 **Serving Information Needs**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC602, or both LBSC601 and LBSC650.

An introduction to the skills necessary to interact directly with individuals through the exploration of user behavior theory, strategies to locate and evaluate information from print and electronic resources, and policies and procedures to ensure that all individuals can become information literate.

IM01	Renee Hill Class time/details on ELMs	Seats (Total: 30) ONLINE
IM02	Beth St Jean Tu 2:00pm - 4:45pm	Seats (Total: 30) ONLINE

LBSC631 **Achieving Organizational Excellence**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC631 or LBSC635.

Overview of the principles, practices, and techniques required for effective leadership and management. The innovative strategies, management responsibilities, and skills needed to achieve and sustain high organizational performance in information-based cultural institutions.

IM01	Ryan O'Grady Class time/details on ELMs	Seats (Total: 30) ONLINE
IM02	Trevor Owens Class time/details on ELMs	Seats (Total: 30) ONLINE

LBSC644 **Collection Development**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: LBSC602; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC 644 or LBSC 708G. Formerly: LBSC 708G.

Activities through which library collections are systematically developed and managed are explored, especially the formulation and implementation of written collection development policies. Other specific topics include identification of user needs; collection evaluation; fund allocation among competing departments, subjects, and/or media; selection methods; intellectual freedom; storage alternatives; and cooperative collection development.

IM01	Elizabeth De Coster Class time/details on ELMs	Seats (Total: 30) ONLINE

LBSC645 **Literature and Materials for Children**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

Survey of literature and other materials for children and youth. Criteria for evaluating and using such materials as they relate to the needs, interests, reading abilities, and other capabilities of young readers.

CT01	Jennifer Sturge Class time/details on ELMs	Seats (Total: 3) ONLINE

IM01	Jennifer Sturge	Seats (Total: 27)
	Class time/details on ELMs	ONLINE

LBSC671 **Creating Information Infrastructures**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC671, or LBSC670 and LBSC690.

Foundations of acquiring and managing collections, information structures, indexing and discovery systems needed by information professionals. An introduction to the theoretical concepts, trends, systems, and technologies central to the information field.

0101	Kathy Weaver	Seats (Total: 30)
	Class time/details on ELMs	ONLINE
IM01	P Kshetry	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

LBSC702 **User Instruction**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC602; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Critical analysis of the rationale, content, and processes of user instruction in library and information settings.

IM01	Abbie Basile	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

LBSC707 **Field Study in Information Service**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC602, LBSC671, and LBSC631; and must have completed an additional 9 credits. Or permission of instructor. Restriction: Must be in Library and Information Science (Master's) program; and permission of INFO-College of Information Studies.

Supervised internship experience in a library, archive, museum, or other information organization.

IM01	Elizabeth De Coster	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

LBSC708U **Special Topics in Library and Information Science; Outreach, Inclusion, and Crowdsourcing**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

A special topics course with content determined by individual instructors. For questions about the content of the course contact the College of Information Studies.

IM01	Victoria Van Hyning	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

LBSC709 **Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Intensive individual study, reading, or research in an area of specialized interest under faculty supervision.

Signed independent study form must be presented to CLIS Admissions Office.

Contact department for information to register for this course.

LBSC723 **Advocacy and Support for Information Services**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

Role and influence of government, foundations, associations, and other organizations in supporting and setting the agenda for information services of all types. Role of information professionals in demonstrating advocacy, fund-raising, public relations, lobbying, and seeking external support.

IM01	Emily Wagner	Seats (Total: 30)
	M 6:00pm - 8:45pm	ONLINE

LBSC724 **Public Library Seminar**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of INFO-College of Information Studies.

Organization, support, and service patterns of public libraries. The public library in national, state, and local contexts.

IM01	Ryan O'Grady	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

LBSC731 **Special Collections**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC602; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Management of special collections, whose holdings may include manuscripts (particularly personal papers), non-textual materials, graphical materials, and rare books, with analysis of the custodial and management functions associated with special collections.

IM01	Ray Barker	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

LBSC742 **Collaborative Instructional Design and Evaluation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST650; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

School librarians' collaborative role in instruction. Systematic design, development, and evaluation of instructional strategies and products for learning.

CT01	Katherine Izsak	Seats (Total: 5)
	Class time/details on ELMs	ONLINE
IM01	Katherine Izsak	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

LBSC749 **Internship in School Libraries**

Credits: 1-6 Grading Method: Regular, Audit

Opportunities to observe and participate in the operation of school libraries at the elementary and secondary levels under the supervision of certified school librarians. Required of all School Library Media certification candidates.

IM01	Bridgette Comanda	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

LBSC751 **Research and Teaching Fellowship II**

Credits: 1 Grading Method: Regular

Restriction: Permission of INFO-College of Information Studies.

Part of the Research and Teaching Fellowship program, a three-semester teacher training and professional development program in academic libraries. Fellows will complete weekly readings, complete weekly teaching reflections, and begin preparations for the academic job search.

IM01	Rachel Gammons	Seats (Total: 7)
	Class time/details on ELMs	ONLINE

LBSC770 **Metadata and Tools for Information Professionals**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC671; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Principles, standards, and practices of information representation to facilitate accessing needed information in digital bibliographic environments. Includes exposure to Metadata, XML, RDA/AACR2R, DTDs, MARC, Dublin Core, MODS, ISBN and ISSN, FRBR, FRAD, Classification systems, and Controlled Vocabularies such as LCSH, SEARS, NLM, Getty and ERIC Thesauri, and others.

IM01	Bria Parker	Seats (Total: 30)
	Th 6:00pm - 8:45pm	ONLINE

LBSC791 **Designing Principled Inquiry**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC671, LBSC602, and LBSC631; and additional 9 credits of coursework applied to the MLIS degree. Or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Critical analysis of roles of information professions and institutions in integrating theory, methods, practice, policies, and values of the field, and applying them to the design of future information systems and services.

IM01	Jordan Sly Class time/details on ELMs	Seats (Total: 30) ONLINE

LGBT Lesbian Gay Bisexual Transgender Studies — Fall 2020

LGBT200 **Introduction to Lesbian, Gay, Bisexual, and Transgender Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB, D | General Education: DSHS, DVUP

Credit only granted for: LGBT200.

An interdisciplinary study of the historical and social contexts of personal, cultural and political aspects of LGBT life. Sources from a variety of fields, such as anthropology, history, psychology, sociology, and women's studies, focusing on writings by and about LGBT people.

0101	Damien Hagen MWF 8:00am - 8:50am	Seats (Total: 30) ONLINE
0201	Damien Hagen MWF 11:00am - 11:50am	Seats (Total: 30) ONLINE
0301	Sydney Lewis TuTh 3:30pm - 4:45pm	Seats (Total: 30) ONLINE

LGBT265 **LGBTQ+ Literatures and Media**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Restriction: Must not have completed LGBT265. Cross-listed with: ENGL265. Credit only granted for: ENGL265 or LGBT265.

A study of literary and cultural expressions of queer and trans identities, positionalities, and analytics through an exploration of literature, art, and media. We will examine historical and political power relations by considering the intersections of sexuality and gender with race, class, nation, and disability. Topics include the social construction and regulation of sexuality and gender, performance and performativity, intersectionality, and the relationship between aesthetic forms and queer/ trans subjectivity. Our interpretations will be informed by queer and trans theories.

0101	Kerishma Panigrahi TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE

0201	Justin Thompson	Seats (Total: 30)	
	TuTh 2:00pm - 3:15pm	ONLINE	

LGBT350 **Lesbian, Gay, Bisexual, and Transgender People and Communication**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, DVCC

Prerequisite: LGBT200; and permission of LGBT Studies Program.

Study of differences, stereotypes, and values distinguishing LGBT people and of effective means of communicating such differences to non-LGBT people. Emphasis on contemporary LGBT life and on the development of didactic skills. Preparation and presentation of forums on LGBT people; facilitation of workshops in various outreach locations (residence halls, Greek system, classes).

0101	Aqdas Aftab, Shige Sakurai	Seats (Total: 12)	
	W 3:30pm - 5:10pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

LGBT386 **Lesbian, Gay, Bisexual, and Transgender Community Organization Internship**

(Perm req)

Credits: 3-6 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, DVCC

Prerequisite: 9 credits in LGBT courses. Restriction: Permission of LGBT Studies Program.

Supervised internship experience with a community organization that expressly serves lesbian, gay, bisexual, and transgender people. Students will be expected to relate course material to experience in an analysis of an organization's activities.

Contact department for information to register for this course.

LGBT448W **Sex, Gender, and Jewish Identity**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Prerequisite: 1 course in WMST; or 1 course in JWST; or 1 course in LGBT; or permission of instructor. Cross-listed with: JWST492, WMST498W. Credit only granted for: JWST492, JWST409G, JWST419W, LGBT448W, or WMST498W. Formerly: JWST409G and JWST419W.

An exploration of Jewish embodiment, including dynamics related to biological sex, culturally-framed gender, and sexuality. Topics of discussion may include transgender and intersex Jews, stereotypes and gender performance, modesty, genetics, and body alteration. Focus is on contemporary Jewish culture, framed within the larger historical and textual tradition.

Also offered as WMST498W and JWST492. Credit granted only for WMST498W, LGBT448W or JWST492.

0101	Maxine Grossman	Seats (Total: 25)
	Th 4:00pm - 6:30pm	ONLINE

LGBT448Y **Special Topics in Lesbian, Gay, Bisexual, and Transgender Studies; Dickinson, Erotics, Poetics, Biopics: Some (Queer) Ways We Read Poetry**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | , D | General Education: DVUP

In-depth study of particular themes and issues in LGBT studies.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Cross-listed with ENGL439D and WMST498Y. Credit only granted for ENGL439D, LGBT448Y, or WMST498Y.

0101	Martha Nell Smith	Seats (Total: 22)
	TuTh 2:00pm - 3:15pm	ONLINE

LGBT499 **Independent Study**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Directed research and analysis in LGBT Studies on a topic selected by the student.

Contact department for information to register for this course.

LING Linguistics Fall 2020

LING200 **Introductory Linguistics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Credit only granted for: HESP120 or LING200. Additional information: Does not count toward the Linguistics major and does not fulfill prerequisite requirements for all upper-level courses.

An exploration of the nature of human language, designed for non-majors. Introduction to the basic concepts and methodology of modern linguistic analysis (sound systems, word formation, sentence structure). Additional topics may include: semantics, pragmatics, social aspects of language, dialects, language change, acquisition, writing systems, typology, language universals, comparison with other communication systems, etc.

0101	Margaret Antonisse MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0102	Margaret Antonisse MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0103	Margaret Antonisse MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0104	Margaret Antonisse MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

LING240 **Language and Mind**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

Additional information: Required for Linguistics majors and recommended for students in related fields.

The study of language as a cognitive phenomenon. Focus on mastering the concepts and technical skills required for further courses in linguistics. Ways of representing people's knowledge of their native language, ways in which that knowledge is attained naturally by children, and how it is used in speaking and listening. Additional topics may include: animal communication, language and the brain, language and thought.

0101	Tonia Bleam MWF 11:00am - 11:50am	Seats (Total: 50) ONLINE	

LING248 **Introduction to Laboratory Research in Linguistics**

(Perm req)

Credits: 2-3 | Grading Method: Regular

Individualized, collaborative research course aimed at developing skills for laboratory research in language acquisition, sentence processing or neurolinguistics. Learning to conduct research in laboratory linguistics as part of a research team that will create original research in the field.

0101	Jeffrey Lidz Contact instructor or department for details.	Seats (Total: 15)	

LING272 **Biophysics of Language**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS, SCIS

Examines the nature of mental representation of language in the physiology of the mind/brain, how it evolved, how it emerges in learners' minds, and how it decays through injury and illness. Insights from linguistics, cognitive psychology, neuroscience, animal behavior, molecular biology, and biophysics are brought to bear on how an abstract systematic behavior can arise within an animal brain.

Restricted to students in Carillon Communities. Options for face-to-face and online participation. Please see the instructor for details.

0101	Juan Uriagereka TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 32) ARM 0135 ONLINE

LING311 **Syntax I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING240.

Basic concepts, analytical techniques of generative syntax, relation to empirical limits imposed by viewing grammars as representations of a component of human mind. Aspects of current theories.

0101	Tonia Bleam TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE

LING320 **Phonetics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Prerequisite: Minimum grade of C- in LING200. Recommended: LING240. Additional information: This course counts as a core course for the linguistics major. Only one of Ling320 or HESP403 can be used to count towards the Linguistics major.

Representations and models of acoustic and articulatory phonetics. Develops concepts and skills for description, measurement and scientific analysis of the sound systems of human languages, including various varieties of English.

0101	William Idsardi Class time/details on ELMs	Seats (Total: 30) ONLINE

LING321 **Phonology I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING240.

Properties of sound systems of human languages, basic concepts and analytical techniques of generative phonology. Empirical limits imposed by viewing grammars as cognitive representations. Physiological properties and phonological systems; articulatory phonetics and distinctive feature theory.

0101	Margaret Antonisse	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

LING410 **Grammar and Meaning**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of instructor; or LING311.

The basic notions of semantic theory: reference, quantification, scope relations, compositionality, thematic relations, tense and time, etc. The role these notions play in grammars of natural languages. Properties of logical form and relationship with syntax.

0101	Valentine Hacquard	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

LING419E **Topics in Syntax; Investigating Linguistic Competence: Theory and Methods**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics vary.

Prerequisite: LING311. Exploration of how to study mental grammar given humans lack of conscious access to it. Focus on the distinction between acceptability and grammaticality; critical consideration of alternative theories for how acceptability and grammaticality are linked; and examination of how to study grammatical competence in children.

0101	Adam Liter	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	ONLINE

LING440 **Grammars and Cognition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING321 and LING311.

Relationship between the structure, development and functioning of grammars and the structure, development and functioning of other mental systems. Interpretations of experimental and observational work on children's language, aphasia, speech production and comprehension.

0101	Ellen Lau	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

LING448 **Advanced Laboratory Research in Linguistics**

(Perm req)

Credits: 2-3 Grading Method: Regular

Individualized, collaborative research course aimed at developing skills for laboratory research in language acquisition, sentence processing or neurolinguistics. Conducting a research project in laboratory linguistics as part of a team creating original research relevant to current issues in linguistics.

0101	Jeffrey Lidz	Seats (Total: 15)
	Contact instructor or department for details.	

LING449E **Topics in Psycholinguistics; Questions: Meanings, Use, and Learning**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Critical evaluation of primary research in psycholinguistics. Relating theoretical hypotheses to experimental hypotheses and predictions. Evaluation of experimental results. Emphasis on hands-on experience and experimental methodologies. Specific topics vary.

Prerequisite: LING311. Exploration and critical examination of semantic and pragmatic theories of questions and how questions are acquired by children.

0101	Yuan Yang	Seats (Total: 10)
	MW 12:00pm - 1:15pm	ONLINE

LING499 **Directed Studies in Linguistics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent study or research on language under the supervision of a faculty member.

Contact department for information to register for this course.

LING499C **Directed Studies in Linguistics; Teaching Assistantship**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Independent study or research on language under the supervision of a faculty member.

Designed for students that will be teaching assistants for LING200.

0101	Margaret Antonisse Contact instructor or department for details.	Seats (Total: 4)
0201	Tonia Bleam Contact instructor or department for details.	Seats (Total: 4)

LING499H **Directed Studies in Linguistics**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Independent study or research on language under the supervision of a faculty member.

Contact department for information to register for this course.

LING610 **Syntactic Theory**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: LING312.

Intensive introduction to transformational syntax.

0101	Howard Lasnik Tu 2:00pm - 4:30pm Class time/details on ELMs Th 2:00pm - 3:30pm	Seats (Total: 15) MMH 1108B ONLINE ONLINE	 Discussion

LING640 **Psycholinguistics**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of instructor.

Core graduate course in psycholinguistics, covering leading theoretical approaches and experimental methods in language acquisition, language processing, and neurolinguistics.

0101	Colin Phillips MW 12:00pm - 1:30pm Class time/details on ELMs	Seats (Total: 20) MMH 1108B ONLINE

LING646 **Cognitive Neuroscience of Language**

Credits: 3 Grading Method: Regular, Audit

Overview of classical and recent work on the neural basis of speech and language, with a goal of introducing contemporary methods and results to prepare the student to read the neurolinguistics and cognitive neuroscience literature. An emphasis will be placed on current techniques.

0101	Ellen Lau MW 10:00am - 11:15am Class time/details on ELMs	Seats (Total: 15) MMH 1108B ONLINE

LING660 **Introduction to Semantics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor.

Basic concepts and methods of contemporary semantic theory including basic set theory, elementary propositional and predicate calculus, the structure of predicates and propositions, quantification binding. Prepares students for study of more advanced topics in semantics.

Cross-listed with PHIL688T. Credit granted for LING660 or PHIL688T.

0101	Alexander Williams TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 15) MMH 1108B ONLINE

LING663 **Pragmatics**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: LING660 or PHIL660; or permission of instructor. Recommended: LING661.

An intensive introduction to formal linguistic pragmatics: the study of systematic dependencies of meaning on context of use. Topics will include implicature, presupposition, reference, topic, focus, and the linguistic means of expressing these.

0101	Alexander Williams	Seats (Total: 10)
	W 9:00am - 11:30am	MMH 3416K

LING689 **Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Independent studies in grammatical theory.

Contact department for information to register for this course.

LING698 **Directed Study; Seminar**

Credits: 1-3 Grading Method: Regular, Audit

0101	Howard Lasnik	Seats (Total: 10)
	F 3:00pm - 5:00pm	Location: TBA

LING698T **Directed Study; Pedagogy for Linguistics**

Credits: 1 Grading Method: Regular, Audit

Required for LING200 Teaching Assistants.

0101	Margaret Antonisse	Seats (Total: 6)
	Contact instructor or department for details.	

LING798 **Research Papers in Linguistics**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

LING799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

LING819M **Seminar in Syntactic Theory**

Credits: 3 Grading Method: Regular, Audit

Current topics in research on syntactic theory.

0101	Maria Polinsky M 2:00pm - 5:00pm Class time/details on ELMs	Seats (Total: 15) MMH 3416K ONLINE

LING848A **Seminar in Computational Linguistics**

Credits: 3 Grading Method: Regular, Audit

Current topics in research in computational linguistics.

0101	Philip Resnik W 2:00pm - 4:30pm	Seats (Total: 15) ONLINE

LING869D **Seminar in Neurolinguistics; Cognitive Neuroscience of Language**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Current topics in research on neurolinguistics.

Cognitive neuroscience of language, including EEG, MEG and fMRI methods.

0101	Ellen Lau Contact instructor or department for details.	Seats (Total: 10)

LING888 **Doctoral Research Paper**

Credits: 1-6 Grading Method: Regular, Audit

Students will strengthen their abilities to formulate coherent research questions, conduct research and create a publishable piece of work. In addition, the course is part of a set of requirements to advance to doctoral candidacy.

0101	Howard Lasnik Contact instructor or department for details.	Seats (Total: 3)
0201	Norbert Hornstein Contact instructor or department for details.	Seats (Total: 3)
0301	Tonia Bleam Contact instructor or department for details.	Seats (Total: 3)

0401	Jeffrey Lidz Contact instructor or department for details.	Seats (Total: 3)
0501	Andrea Zukowski Contact instructor or department for details.	Seats (Total: 3)
0601	Juan Uriagereka Contact instructor or department for details.	Seats (Total: 3)
0701	Amy Weinberg Contact instructor or department for details.	Seats (Total: 3)
0801	William Idsardi Contact instructor or department for details.	Seats (Total: 3)
0901	Philip Resnik Contact instructor or department for details.	Seats (Total: 3)
1001	Maria Polinsky Contact instructor or department for details.	Seats (Total: 3)
1101	Paul Pietroski Contact instructor or department for details.	Seats (Total: 3)
1201	Colin Phillips Contact instructor or department for details.	Seats (Total: 3)
1301	Margaret Antonisse Contact instructor or department for details.	Seats (Total: 3)
1401	Valentine Hacquard Contact instructor or department for details.	Seats (Total: 3)
1501	Alexander Williams Contact instructor or department for details.	Seats (Total: 3)
1601	Naomi Feldman Contact instructor or department for details.	Seats (Total: 3)
1701	Ellen Lau Contact instructor or department for details.	Seats (Total: 3)
1801	Omer Preminger Contact instructor or department for details.	Seats (Total: 3)

LING889 **Directed Research**

Credits: 1-8 Grading Method: Regular, Audit

Contact department for information to register for this course.

LING889A **Directed Research; Professional Methods**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

This course covers many aspects of early career professional academmic life in Linguistics.

0101	Howard Lasnik	Seats (Total: 15)
	W 3:00pm - 4:30pm	ONLINE

LING896 **Research Paper in Minor Area**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LING888.

This course is designed to strengthen the students' ability to do research in a minor area of expertise, and to help them create a publishable piece. In addition, the course constitutes part of a set of requirements to advance to doctoral candidacy.

Contact department for information to register for this course.

LING898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

LING899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MATH Mathematics Fall 2020

MATH003 **Developmental Mathematics**

Credits: 3 Grading Method: Sat-Fail

A review of Intermediate High School Algebra intended for students preparing for one of the credit bearing Fundamental Studies Math Courses. It is taught in special computer labs using a self-paced computer program. The curriculum will be geared toward the student's level of algebra skills and eventual goals. There is a special fee for the course that may be applied in addition to the regular tuition charge. Students should refer to the schedule of classes for details on fees as they apply to a particular semester. The course does not carry any credit toward any degree at the University. The course is repeatable. Topics will be chosen from exponents, polynomials, linear equations, quadratic equations as well as polynomial, rational, exponential and logarithm functions and elementary probability or statistics, depending on the student.

There is a special fee for this class in addition to the regular tuition charge.

0102	Matt Wilson MWF 8:00am - 9:50am *Restricted to students in the uTERP Program only.*	Seats (Total: 20) ONLINE
0201	Jayna Resman MWF 10:00am - 11:50am	Seats (Total: 30) ONLINE
0202	Jayna Resman MWF 10:00am - 11:50am	Seats (Total: 20) ONLINE
0601	Colleen Terpos TuTh 8:00am - 10:45am	Seats (Total: 30) ONLINE
0602	Colleen Terpos TuTh 8:00am - 10:45am	Seats (Total: 20) ONLINE
0701	Colleen Terpos TuTh 11:00am - 1:45pm	Seats (Total: 30) ONLINE
0702	Colleen Terpos TuTh 11:00am - 1:45pm	Seats (Total: 20) ONLINE
FC01	Carlotta Amaduzzi MW 6:00pm - 8:45pm *Restricted to students in Freshman Connection.*	Seats (Total: 42) ONLINE

MATH007 **Algebra for MATH 107**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A review of Intermediate High School Algebra intended for students preparing for MATH107. It is taught 5 days per week for the first 5 weeks, then leads directly into a special section of MATH107, the same semester, which also meets 5 days per week. Continuation in MATH107 is conditional on the student passing the MATHEMATICS PLACEMENT EXAM at the appropriate level. Topics include linear equations, linear inequalities, operations on polynomials, factoring, solutions of quadratic equations, as well as exponential and logarithm functions. MATH007 does not carry any credit toward any degree at the University, nor is it graded. It leads to either MATH107 or MATH003, both of which are graded.

1101	Debra Franklin MTuWThF 11:00am - 11:50am	Seats (Total: 20) ONLINE
1201	Debra Franklin MTuWThF 1:00pm - 1:50pm	Seats (Total: 20) ONLINE

MATH013 **Algebra for MATH 113**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A review of Intermediate High School Algebra intended for students preparing for MATH113. It is taught 5 days per week for the first 5 weeks, then leads directly into a special section of MATH113, the same semester, which also meets 5 days per week. Continuation in MATH113 is conditional on the student passing the MATHEMATICS PLACEMENT EXAM at the appropriate level. Topics include exponents, polynomials, linear equations, quadratic equations, as well as polynomial, rational, exponential, logarithm functions, and trigonometry. MATH013 does not carry any credit toward any degree at the University, nor is it graded. It leads directly to MATH113 (or MATH110), or MATH003, all of which are graded.

1101	Santuria Orsetti MTuWThF 9:00am - 9:50am	Seats (Total: 22) ONLINE
1201	Santuria Orsetti MTuWThF 11:00am - 11:50am	Seats (Total: 22) ONLINE
1301	Barbara Michelato MTuWThF 12:00pm - 12:50pm	Seats (Total: 22) ONLINE
1401	Barbara Michelato MTuWThF 1:00pm - 1:50pm	Seats (Total: 22) ONLINE

MATH015 **Algebra for MATH 115**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A review of Intermediate High School Algebra intended for students preparing for MATH115. It is taught 5 days per week for the first 5 weeks, then leads directly into a special section of MATH115, the same semester, which also meets 5 days per week. Continuation in MATH115 is conditional on the student passing the MATHEMATICS PLACEMENT EXAM at the appropriate level. Topics include exponents, polynomials, linear equations in one and two variables, quadratic equations, as well as polynomial, rational, exponential, logarithm functions and trigonometry. MATH015 does not carry any credit toward any degree at the University, nor is it graded. It leads directly to MATH115 (or MATH111 or MATH113 or MATH110), or MATH003, all of which are graded.

1101	Franck Olivier Ndjakou Njeunje MTuWThF 9:00am - 9:50am	Seats (Total: 25) ONLINE
1201	Ben Bezejouh MTuWThF 11:00am - 11:50am	Seats (Total: 25) ONLINE
1301	Franck Olivier Ndjakou Njeunje MTuWThF 12:00pm - 12:50pm	Seats (Total: 25) ONLINE
1401	Ben Bezejouh MTuWThF 1:00pm - 1:50pm	Seats (Total: 25) ONLINE

MATH107 **Introduction to Math Modeling and Probability**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSMA

Prerequisite: Must have math eligibility of Math 107 or higher; and math eligibility is based on Math Placement Exam or successful completion of MATH003 with appropriate eligibility. Restriction: Not open to students majoring in mathematics, engineering, business, life sciences, and the physical sciences;; and must not have completed MATH120, MATH130, MATH136, or MATH140; and must not have completed MATH220; and must not have completed any MATH or STAT course with a prerequisite of MATH120, MATH130, MATH136, MATH140 or MATH220. Credit only granted for: STAT100, MATH107, MATH110, MATH111, MATH112, or MATH113. Formerly: Math 110 and Math 111. Additional information: Students who have credits for MATH107 may not also receive credits for STAT100, MATH110, MATH 111, MATH112, or MATH113.

A goal is to convey the power of mathematics as shown by a variety of problems which can be modeled and solved by quantitative means. Also included is an introduction to probability. Topics include data analysis, equations, systems of equations, inequalities, elementary linear programming, Venn diagrams, counting, basic probability, permutations, combinations, tree diagrams, standard normal and normal distributions. The mathematics of finance is covered. The course includes problem solving and decision making in economics, management, and social sciences.

0101	Tong Qi MWF 11:00am - 11:50am	Seats (Total: 30) ONLINE

0201	Tong Qi MWF 12:00pm - 12:50pm	Seats (Total: 30) ONLINE
0301	Victoria Whitley MWF 1:00pm - 1:50pm	Seats (Total: 30) ONLINE
0401	Victoria Whitley MWF 2:00pm - 2:50pm	Seats (Total: 30) ONLINE
FC01	Julie Daberkow MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE

MATH113 **College Algebra and Trigonometry**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSMA

Prerequisite: Must have math eligibility of MATH113 or higher; and math eligibility is based on the Math Placement Exam or the successful completion of MATH 003 with appropriate eligibility. Restriction: Must not have completed MATH115, MATH120, MATH130, MATH136, or MATH140; and must not have completed any course with a prerequisite of MATH120, MATH130, MATH136, MATH140 or MATH220; and must not have completed MATH112 or MATH220. Credit only granted for: Students who have credits for MATH113 may not also receive credits for MATH107, MATH110, MATH112, or MATH115.

Topics include elementary functions including graphs and applications of: polynomial, rational, exponential, and logarithmic functions. Systems of equations and applications. Trigonometric functions: angle and radian measure, graphs and applications.

0101	Aquia Richburg MWF 10:00am - 10:50am	Seats (Total: 30) ONLINE
0102	Kayla Davie MWF 10:00am - 10:50am	Seats (Total: 30) ONLINE
0103	Samuel Dipasqua MWF 10:00am - 10:50am	Seats (Total: 30) ONLINE
0104	Raymond Schram MWF 10:00am - 10:50am	Seats (Total: 30) ONLINE

0201	Aquia Richburg MWF 11:00am - 11:50am	Seats (Total: 30) ONLINE
0202	Kayla Davie MWF 11:00am - 11:50am	Seats (Total: 30) ONLINE
0203	Samuel Dipasqua MWF 11:00am - 11:50am	Seats (Total: 30) ONLINE
0204	Raymond Schram MWF 11:00am - 11:50am	Seats (Total: 30) ONLINE
0301	Jermain McDermott MWF 3:00pm - 3:50pm	Seats (Total: 30) ONLINE
0302	Blake Fritz MWF 3:00pm - 3:50pm	Seats (Total: 30) ONLINE
0401	Jermain McDermott MWF 4:00pm - 4:50pm	Seats (Total: 30) ONLINE
0402	Blake Fritz MWF 4:00pm - 4:50pm	Seats (Total: 30) ONLINE
FC01	Jocelyn Menecio TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE
FC02	Amador Jomuad TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE
FC03	Jocelyn Menecio TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE
FC04	Amador Jomuad TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE

FC05	Darcy Conant MW 3:00pm - 4:15pm	Seats (Total: 33) ONLINE	
FC06	Brandon Alexander MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE	

MATH115 **Precalculus**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSMA

Prerequisite: Must have math eligibility of MATH115 or higher; and math eligibility is based on the Math Placement Exam or the successful completion of MATH003 with appropriate eligibility. Or MATH113. Restriction: Must not have completed MATH140; and must not have completed any MATH or STAT course with a prerequisite of MATH140. Credit only granted for: Students who have credits for MATH115 may not also receive credits for MATH112 or MATH113.

Preparation for MATH120, MATH130 or MATH140. Elementary functions and graphs: polynomials, rational functions, exponential and logarithmic functions, trigonometric functions. Algebraic techniques preparatory for calculus.

All sections will require the use of a TI graphics calculator. Instructor will use a TI-83 or a TI-83+,TI 84, TI 84+, TI 86, or TI 89 calculator.

0111	Raluca Rosca MWF 9:00am - 9:50am MWF 10:00am - 10:50am	Seats (Total: 28) ONLINE ONLINE	 Lab
0121	Raluca Rosca MWF 9:00am - 9:50am MWF 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	 Lab
0131	Raluca Rosca MWF 9:00am - 9:50am MWF 12:00pm - 12:50pm	Seats (Total: 28) ONLINE ONLINE	 Lab
0141	Raluca Rosca MWF 9:00am - 9:50am MWF 1:00pm - 1:50pm	Seats (Total: 28) ONLINE ONLINE	 Lab
0151	Raluca Rosca MWF 9:00am - 9:50am MWF 2:00pm - 2:50pm	Seats (Total: 28) ONLINE ONLINE	 Lab

0161	Raluca Rosca MWF 9:00am - 9:50am MWF 3:00pm - 3:50pm	Seats (Total: 28) ONLINE ONLINE	 Lab
0171	Raluca Rosca MWF 9:00am - 9:50am TuTh 9:30am - 10:45am	Seats (Total: 28) ONLINE ONLINE	 Lab
0181	Raluca Rosca MWF 9:00am - 9:50am TuTh 11:00am - 12:15pm	Seats (Total: 28) ONLINE ONLINE	 Lab
0191	Raluca Rosca MWF 9:00am - 9:50am TuTh 12:30pm - 1:45pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0192	Raluca Rosca MWF 9:00am - 9:50am TuTh 2:00pm - 3:15pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
FC01	Raluca Rosca MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE	
FC02	Sean Gruber MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE	
FC03	Jocelyn Menecio MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE	
FC04	Ramon Braza MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE	

MATH120 **Elementary Calculus I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: FSAR, FSMA

Prerequisite: 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115). Or must have math eligibility of MATH120 or higher; and math eligibility is based on the Math Placement Test. Restriction: Not open to students majoring in mathematics, engineering, the biological sciences, biochemistry, chemistry, or the physical sciences. Credit only granted for: MATH120, MATH130, MATH136, MATH140, or MATH220. Formerly: MATH220.

Basic ideas of differential and integral calculus, with emphasis on elementary techniques of differentiation and applications.

0111	Samuel Braunfeld MWF 9:00am - 9:50am Th 8:00am - 8:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0112	Samuel Braunfeld MWF 9:00am - 9:50am Th 8:00am - 8:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0121	Samuel Braunfeld MWF 9:00am - 9:50am Th 9:30am - 10:20am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0122	Samuel Braunfeld MWF 9:00am - 9:50am Th 9:30am - 10:20am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0131	Samuel Braunfeld MWF 9:00am - 9:50am Th 11:00am - 11:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0132	Samuel Braunfeld MWF 9:00am - 9:50am Th 11:00am - 11:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0141	Samuel Braunfeld MWF 9:00am - 9:50am Th 12:30pm - 1:20pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0142	Samuel Braunfeld MWF 9:00am - 9:50am Th 12:30pm - 1:20pm	Seats (Total: 32) ONLINE ONLINE	 Discussion

0211	Adam Kanigowski TuTh 9:30am - 10:45am F 8:00am - 8:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0221	Adam Kanigowski TuTh 9:30am - 10:45am F 9:00am - 9:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0231	Adam Kanigowski TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0232	Adam Kanigowski TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0241	Adam Kanigowski TuTh 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0242	Adam Kanigowski TuTh 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0251	Adam Kanigowski TuTh 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0252	Adam Kanigowski TuTh 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0311	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 8:00am - 8:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0331	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

0341	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0351	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0411	Lawrence Washington TuTh 11:00am - 12:15pm M 8:00am - 8:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0421	Lawrence Washington TuTh 11:00am - 12:15pm M 9:00am - 9:50am	Seats (Total: 32) ONLINE ONLINE	 Discussion
0431	Lawrence Washington TuTh 11:00am - 12:15pm M 12:00pm - 12:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0432	Lawrence Washington TuTh 11:00am - 12:15pm M 12:00pm - 12:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0441	Lawrence Washington TuTh 11:00am - 12:15pm M 1:00pm - 1:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0442	Lawrence Washington TuTh 11:00am - 12:15pm M 1:00pm - 1:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0451	Lawrence Washington TuTh 11:00am - 12:15pm M 2:00pm - 2:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion
0452	Lawrence Washington TuTh 11:00am - 12:15pm M 2:00pm - 2:50pm	Seats (Total: 32) ONLINE ONLINE	 Discussion

FC01	John Quah MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 37) ONLINE
FC02	Franck Olivier Ndjakou Njeunje MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 36) ONLINE
FC03	Ben Bezejouh MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 37) ONLINE
FC04	Franck Olivier Ndjakou Njeunje MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 37) ONLINE

MATH121 **Elementary Calculus II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220. Restriction: Not open to students majoring in mathematics, engineering, the biological sciences, biochemistry, chemistry, or the physical sciences. Credit only granted for: MATH121, MATH131, MATH141, or MATH221. Formerly: MATH 221.

Differential and integral calculus, with emphasis on elementary techniques of integration and applications.

0101	Arghya Sadhukhan MWF 12:00pm - 12:50pm	Seats (Total: 20) ONLINE
0201	Arghya Sadhukhan MWF 1:00pm - 1:50pm	Seats (Total: 20) ONLINE

MATH135 **Discrete Mathematics for Life Sciences**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR, FSMA

Prerequisite: Minimum grade of C- in MATH115; or must have math eligibility of MATH140 or higher; and math eligibility is based on the Math Placement Test. Restriction: Must be in the Biological Sciences or Neuroscience major; and not open to students majoring in mathematics, engineering, or the physical sciences.

Basic discrete mathematics, with emphasis on relevant models and techniques to the life sciences.

0111	Jakob Hultgren TuTh 9:30am - 10:45am WF 8:00am - 8:50am	Seats (Total: 26) ONLINE ONLINE	 Discussion
0112	Jakob Hultgren TuTh 9:30am - 10:45am WF 8:00am - 8:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0121	Jakob Hultgren TuTh 9:30am - 10:45am WF 9:00am - 9:50am	Seats (Total: 26) ONLINE ONLINE	 Discussion
0122	Jakob Hultgren TuTh 9:30am - 10:45am WF 9:00am - 9:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0131	Jakob Hultgren TuTh 9:30am - 10:45am WF 10:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	 Discussion
0132	Jakob Hultgren TuTh 9:30am - 10:45am WF 10:00am - 10:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0141	Jakob Hultgren TuTh 9:30am - 10:45am WF 11:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	 Discussion
0142	Jakob Hultgren TuTh 9:30am - 10:45am WF 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0211	Todd Rowland TuTh 2:00pm - 3:15pm MW 8:00am - 8:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion

0212	Todd Rowland TuTh 2:00pm - 3:15pm MW 8:00am - 8:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0221	Todd Rowland TuTh 2:00pm - 3:15pm MW 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0222	Todd Rowland TuTh 2:00pm - 3:15pm MW 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0231	Todd Rowland TuTh 2:00pm - 3:15pm MW 11:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0232	Todd Rowland TuTh 2:00pm - 3:15pm MW 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0241	Todd Rowland TuTh 2:00pm - 3:15pm MW 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion
0242	Todd Rowland TuTh 2:00pm - 3:15pm MW 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	Discussion

MATH136 **Calculus for Life Sciences**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH135. Restriction: Must be in the Biological Sciences or Neuroscience major. Credit only granted for: MATH120, MATH130, MATH136, or MATH140.

Continuation of MATH135, including basic ideas of differential integral calculus, with emphasis on elementary techniques and applications to the life sciences.

0111	Changguang Dong TuTh 11:00am - 12:15pm MW 9:00am - 9:50am	Seats (Total: 25) ONLINE ONLINE	Discussion

0121	Changguang Dong TuTh 11:00am - 12:15pm MW 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0131	Changguang Dong TuTh 11:00am - 12:15pm MW 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0141	Changguang Dong TuTh 11:00am - 12:15pm MW 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

MATH140 **Calculus I**

Credits: 4	Grading Method: Regular, Pass-Fail, Audit	CORE: MS	General Education: FSAR, FSMA

Prerequisite: Minimum grade of C- in MATH115. Or must have math eligibility of MATH140 or higher; and math eligibility is based on the Math Placement Test. Credit only granted for: MATH120, MATH130, MATH136, MATH140 or MATH220.

Introduction to calculus, including functions, limits, continuity, derivatives and applications of the derivative, sketching of graphs of functions, definite and indefinite integrals, and calculation of area. The course is especially recommended for science, engineering and mathematics majors.

All sections will require the use of a TI graphics calculator. Instructor will use a TI-83, TI-83+, TI 84, TI 84+, TI 86, or TI 89 calculator. Emphasis on student interaction in groups, including team approach to solving calculus based problems. There will be 3 one-hour lectures and 2 eighty-minute workshops each week with enhanced assistance and support for students.

0111	Denny Gulick MWF 8:00am - 8:50am TuTh 8:00am - 9:20am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0112	Denny Gulick MWF 8:00am - 8:50am TuTh 8:00am - 9:20am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0113	Denny Gulick MWF 8:00am - 8:50am TuTh 8:00am - 9:20am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0121	Denny Gulick MWF 8:00am - 8:50am TuTh 9:30am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0122	Denny Gulick MWF 8:00am - 8:50am TuTh 9:30am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0123	Denny Gulick MWF 8:00am - 8:50am TuTh 9:30am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0131	Denny Gulick MWF 8:00am - 8:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0132	Denny Gulick MWF 8:00am - 8:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0211	Yordanka Kovacheva MWF 10:00am - 10:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0212	Yordanka Kovacheva MWF 10:00am - 10:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0213	Yordanka Kovacheva MWF 10:00am - 10:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0221	Yordanka Kovacheva MWF 10:00am - 10:50am TuTh 12:30pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0222	Yordanka Kovacheva MWF 10:00am - 10:50am TuTh 12:30pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

0223	Yordanka Kovacheva MWF 10:00am - 10:50am TuTh 12:30pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0231	Yordanka Kovacheva MWF 10:00am - 10:50am TuTh 2:00pm - 3:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0232	Yordanka Kovacheva MWF 10:00am - 10:50am TuTh 2:00pm - 3:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0311	Timothy Pilachowski MWF 11:00am - 11:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0312	Timothy Pilachowski MWF 11:00am - 11:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0313	Timothy Pilachowski MWF 11:00am - 11:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0321	Timothy Pilachowski MWF 11:00am - 11:50am TuTh 12:30pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0322	Timothy Pilachowski MWF 11:00am - 11:50am TuTh 12:30pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0323	Timothy Pilachowski MWF 11:00am - 11:50am TuTh 12:30pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0331	Timothy Pilachowski MWF 11:00am - 11:50am TuTh 2:00pm - 3:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

0332	Timothy Pilachowski MWF 11:00am - 11:50am TuTh 2:00pm - 3:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0411	Mestiyage Gunatilleka MWF 1:00pm - 1:50pm TuTh 9:30am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0412	Mestiyage Gunatilleka MWF 1:00pm - 1:50pm TuTh 9:30am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0421	Mestiyage Gunatilleka MWF 1:00pm - 1:50pm TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0422	Mestiyage Gunatilleka MWF 1:00pm - 1:50pm TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0431	Mestiyage Gunatilleka MWF 1:00pm - 1:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0432	Mestiyage Gunatilleka MWF 1:00pm - 1:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0511	Steven Chadwick MWF 2:00pm - 2:50pm TuTh 8:00am - 9:20am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0512	Steven Chadwick MWF 2:00pm - 2:50pm TuTh 8:00am - 9:20am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0513	Steven Chadwick MWF 2:00pm - 2:50pm TuTh 8:00am - 9:20am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0521	Steven Chadwick MWF 2:00pm - 2:50pm TuTh 9:30am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0522	Steven Chadwick MWF 2:00pm - 2:50pm TuTh 9:30am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0523	Steven Chadwick MWF 2:00pm - 2:50pm TuTh 9:30am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0531	Steven Chadwick MWF 2:00pm - 2:50pm TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	Discussion
0532	Steven Chadwick MWF 2:00pm - 2:50pm TuTh 11:00am - 12:20pm	Seats (Total: 25) ONLINE ONLINE	Discussion
FC01	Mestiyage Gunatilleka MWTh 3:00pm - 4:15pm F 9:30am - 10:45am *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE ONLINE	Discussion
FC02	Mestiyage Gunatilleka MWTh 3:00pm - 4:15pm F 9:30am - 10:45am *Restricted to students in Freshmen Connection.*	Seats (Total: 34) ONLINE ONLINE	Discussion
FC03	Mestiyage Gunatilleka MWTh 3:00pm - 4:15pm F 1:00pm - 2:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 34) ONLINE ONLINE	Discussion
FC04	Mestiyage Gunatilleka MWTh 3:00pm - 4:15pm F 1:00pm - 2:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE ONLINE	Discussion

FC05	Mestiyage Gunatilleka MWTh 3:00pm - 4:15pm F 2:30pm - 3:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 34) ONLINE ONLINE	Discussion
FC06	Mestiyage Gunatilleka MWTh 3:00pm - 4:15pm F 2:30pm - 3:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE ONLINE	Discussion
FC07	Craig Schlenoff MWTh 4:30pm - 5:45pm F 11:00am - 12:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 34) ONLINE ONLINE	Discussion
FC08	Craig Schlenoff MWTh 4:30pm - 5:45pm F 1:00pm - 2:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE ONLINE	Discussion

MATH140H **Calculus I**

Credits: 4	Grading Method: Regular, Pass-Fail, Audit	CORE: MS	General Education: FSAR, FSMA

Prerequisite: Minimum grade of C- in MATH115. Or must have math eligibility of MATH140 or higher; and math eligibility is based on the Math Placement Test. Credit only granted for: MATH120, MATH130, MATH136, MATH140 or MATH220.

Introduction to calculus, including functions, limits, continuity, derivatives and applications of the derivative, sketching of graphs of functions, definite and indefinite integrals, and calculation of area. The course is especially recommended for science, engineering and mathematics majors.

For general honors students only. Offered fall only. All sections will require the use of a TI graphics calculator. Instructor will use a TI-83 TI-83+, TI 84, TI 84+, TI 86, or TI 89 calculator.

0101	Steven Chadwick MF 10:00am - 10:50am W 10:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE
0201	Jacob Bedrossian WF 1:00pm - 1:50pm M 1:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE

MATH141 **Calculus II**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: MS

Prerequisite: Minimum grade of C- in MATH140. Or 1 course with a minimum grade of B- from (MATH130, MATH136); and permission of CMNS-Mathematics department. Credit only granted for: MATH121, MATH131, MATH141, or MATH221.

Continuation of MATH140, including techniques of integration, improper integrals, applications of integration (such as volumes, work, arc length, moments), inverse functions, exponential and logarithmic functions, sequences and series.

All sections will require the use of a TI graphics calculator. Instructor will use a TI-83, TI-83+, TI 84, TI 84+, TI 86, or TI 89 calculator.

0111	Todd Rowland MWF 10:00am - 10:50am TuTh 8:00am - 8:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0121	Todd Rowland MWF 10:00am - 10:50am TuTh 9:00am - 9:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0131	Todd Rowland MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0132	Todd Rowland MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0141	Todd Rowland MWF 10:00am - 10:50am TuTh 11:00am - 11:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0142	Todd Rowland MWF 10:00am - 10:50am TuTh 11:00am - 11:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0211	Stefan Doboszczak MWF 9:00am - 9:50am TuTh 8:00am - 8:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion

0212	Stefan Doboszczak MWF 9:00am - 9:50am TuTh 8:00am - 8:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0221	Stefan Doboszczak MWF 9:00am - 9:50am TuTh 9:00am - 9:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0222	Stefan Doboszczak MWF 9:00am - 9:50am TuTh 9:00am - 9:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0231	Stefan Doboszczak MWF 9:00am - 9:50am TuTh 10:00am - 10:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0241	Stefan Doboszczak MWF 9:00am - 9:50am TuTh 11:00am - 11:50am	Seats (Total: 29) ONLINE ONLINE	 Discussion
0251	Stefan Doboszczak MWF 9:00am - 9:50am TuTh 12:00pm - 12:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0261	Stefan Doboszczak MWF 9:00am - 9:50am TuTh 1:00pm - 1:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0311	Jingren Chi MWF 12:00pm - 12:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0321	Jingren Chi MWF 12:00pm - 12:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0331	Jingren Chi MWF 12:00pm - 12:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion

0341	Jingren Chi MWF 12:00pm - 12:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0411	Jonathan Fernandes MWF 2:00pm - 2:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0421	Jonathan Fernandes MWF 2:00pm - 2:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0431	Jonathan Fernandes MWF 2:00pm - 2:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0441	Jonathan Fernandes MWF 2:00pm - 2:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
FC01	Brandon Johnson MWTh 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 26) ONLINE	
FC02	Laura Iosip MWTh 3:00pm - 4:15pm *Restricted to students in Freshman Connection.*	Seats (Total: 26) ONLINE	
FC03	Todd Rowland MWTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 26) ONLINE	

MATH141H **Calculus II**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: MS

Prerequisite: Minimum grade of C- in MATH140. Or 1 course with a minimum grade of B- from (MATH130, MATH136); and permission of CMNS-Mathematics department. Credit only granted for: MATH121, MATH131, MATH141, or MATH221.

Continuation of MATH140, including techniques of integration, improper integrals, applications of integration (such as volumes, work, arc length, moments), inverse functions, exponential and logarithmic functions, sequences and series.

For general honors students only. TI graphics calculator required. Instructor will use a TI-83, TI-83+, TI 84, TI 84+, TI 86, or TI 89 calculator.

0101	Jonathan Fernandes	Seats (Total: 25)
	WF 10:00am - 10:50am	ONLINE
	M 10:00am - 11:50am	ONLINE
0201	Yijing Wu	Seats (Total: 25)
	MF 2:00pm - 2:50pm	ONLINE
	W 2:00pm - 3:50pm	ONLINE

MATH206 **Introduction to Matlab**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH136, MATH140).

This course is intended to prepare students for subsequent courses requiring computation with MATLAB. Covers basics of MATLAB including simple commands, variables, solving equations, graphing differentiation and integration, matrices and vectors, functions, M-files and fundamentals of programming in the MATLAB environment. When offered in Winter and Summer terms, the course is offered in a format suitable for online distance learning.

0101	Justin Wyss-Gallifent	Seats (Total: 450)
	Meets August 31, 2020 - October 10, 2020	
	Class time/details on ELMs	ONLINE

MATH212 **Elements of Numbers and Operations**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed one year of college preparatory algebra. Restriction: Must be in one of the following programs (Early Childhood Education; Special Education; Elementary Education). Credit only granted for: MATH212 or MATH210.

Reviews and extends topics of arithmetic and number theory related to the elementary school curriculum, particularly number systems and operations with natural numbers, integers, and rationals.

0101	Carolina Napp-Avelli MWF 10:00am - 10:50am	Seats (Total: 22) ONLINE
0401	Kelly Ivy MWF 2:00pm - 2:50pm	Seats (Total: 20) ONLINE

MATH213 **Elements of Geometry and Measurement**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH212. Restriction: Must be in one of the following programs (Early Childhood Education; Special Education; Elementary Education). Credit only granted for: MATH211 or MATH213.

Properties of geometric objects in two and three dimensions; parallel lines, curves and polygons; ratio, proportion, similarity; transformational geometry and measurement, constructions, justifications and proofs.

0101	S Gilles MWF 9:00am - 9:50am	Seats (Total: 20) ONLINE
0201	S Gilles MWF 10:00am - 10:50am	Seats (Total: 20) ONLINE

MATH214 **Elements of Probability and Statistics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH212. Restriction: Must be in one of the following programs (Early Childhood Education; Special Education; Elementary Education). Credit only granted for: MATH211 or MATH214.

Permutations and combinations; probability; collecting and representing data; using statistics to analyze and interpret data.

0201	Siddharth Sharma MWF 9:00am - 9:50am	Seats (Total: 27) ONLINE

MATH240 **Introduction to Linear Algebra**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH131, MATH141). Credit only granted for: MATH240, MATH341, or MATH461.

Basic concepts of linear algebra: vector spaces, applications to line and plane geometry, linear equations and matrices, similar matrices, linear transformations, eigenvalues, determinants and quadratic forms.

0111	Eoin Mackall MWF 11:00am - 11:50am TuTh 12:00pm - 12:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0112	Eoin Mackall MWF 11:00am - 11:50am TuTh 12:00pm - 12:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0121	Eoin Mackall MWF 11:00am - 11:50am TuTh 1:00pm - 1:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0122	Eoin Mackall MWF 11:00am - 11:50am TuTh 1:00pm - 1:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0131	Eoin Mackall MWF 11:00am - 11:50am TuTh 2:00pm - 2:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0132	Eoin Mackall MWF 11:00am - 11:50am TuTh 2:00pm - 2:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0141	Eoin Mackall MWF 11:00am - 11:50am TuTh 3:00pm - 3:50pm	Seats (Total: 29) ONLINE ONLINE	 Discussion
0142	Eoin Mackall MWF 11:00am - 11:50am TuTh 3:00pm - 3:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0211	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion

0212	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 28) ONLINE ONLINE	Discussion
0221	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 28) ONLINE ONLINE	Discussion
0222	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 29) ONLINE ONLINE	Discussion
0231	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0232	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 28) ONLINE ONLINE	Discussion
0241	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 29) ONLINE ONLINE	Discussion
0242	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0311	Nathan Manning MWF 3:00pm - 3:50pm TuTh 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	Discussion
0312	Nathan Manning MWF 3:00pm - 3:50pm TuTh 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	Discussion
0321	Nathan Manning MWF 3:00pm - 3:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 28) ONLINE ONLINE	Discussion

0322	Nathan Manning MWF 3:00pm - 3:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0331	Nathan Manning MWF 3:00pm - 3:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0332	Nathan Manning MWF 3:00pm - 3:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0341	Nathan Manning MWF 3:00pm - 3:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion
0342	Nathan Manning MWF 3:00pm - 3:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 28) ONLINE ONLINE	 Discussion

MATH241 **Calculus III**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH241 or MATH340.

Introduction to multivariable calculus, including vectors and vector-valued functions, partial derivatives and applications of partial derivatives (such as tangent planes and Lagrange multipliers), multiple integrals, volume, surface area, and the classical theorems of Green, Stokes and Gauss.

All sections will use MATLAB.

0111	Manoussos Grillakis MWF 10:00am - 10:50am TuTh 8:00am - 8:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0112	Manoussos Grillakis MWF 10:00am - 10:50am TuTh 8:00am - 8:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion

0121	Manoussos Grillakis MWF 10:00am - 10:50am TuTh 9:00am - 9:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0122	Manoussos Grillakis MWF 10:00am - 10:50am TuTh 9:00am - 9:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0131	Manoussos Grillakis MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0132	Manoussos Grillakis MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0141	Manoussos Grillakis MWF 10:00am - 10:50am TuTh 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0142	Manoussos Grillakis MWF 10:00am - 10:50am TuTh 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0211	Wiseley Wong MWF 11:00am - 11:50am TuTh 8:00am - 8:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0212	Wiseley Wong MWF 11:00am - 11:50am TuTh 8:00am - 8:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0221	Wiseley Wong MWF 11:00am - 11:50am TuTh 9:00am - 9:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0222	Wiseley Wong MWF 11:00am - 11:50am TuTh 9:00am - 9:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion

0231	Wiseley Wong	Seats (Total: 28)	
	MWF 11:00am - 11:50am	ONLINE	
	TuTh 10:00am - 10:50am	ONLINE	Discussion
0232	Wiseley Wong	Seats (Total: 29)	
	MWF 11:00am - 11:50am	ONLINE	
	TuTh 10:00am - 10:50am	ONLINE	Discussion
0241	Wiseley Wong	Seats (Total: 28)	
	MWF 11:00am - 11:50am	ONLINE	
	TuTh 12:00pm - 12:50pm	ONLINE	Discussion
0242	Wiseley Wong	Seats (Total: 28)	
	MWF 11:00am - 11:50am	ONLINE	
	TuTh 12:00pm - 12:50pm	ONLINE	Discussion
0311	Justin Wyss-Gallifent	Seats (Total: 28)	
	MWF 12:00pm - 12:50pm	ONLINE	
	TuTh 10:00am - 10:50am	ONLINE	Discussion
0312	Justin Wyss-Gallifent	Seats (Total: 28)	
	MWF 12:00pm - 12:50pm	ONLINE	
	TuTh 10:00am - 10:50am	ONLINE	Discussion
0321	Justin Wyss-Gallifent	Seats (Total: 29)	
	MWF 12:00pm - 12:50pm	ONLINE	
	TuTh 11:00am - 11:50am	ONLINE	Discussion
0322	Justin Wyss-Gallifent	Seats (Total: 29)	
	MWF 12:00pm - 12:50pm	ONLINE	
	TuTh 11:00am - 11:50am	ONLINE	Discussion
0331	Justin Wyss-Gallifent	Seats (Total: 29)	
	MWF 12:00pm - 12:50pm	ONLINE	
	TuTh 12:00pm - 12:50pm	ONLINE	Discussion
0341	Justin Wyss-Gallifent	Seats (Total: 28)	
	MWF 12:00pm - 12:50pm	ONLINE	
	TuTh 1:00pm - 1:50pm	ONLINE	Discussion

0411	Kendall Williams	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ONLINE	
	TuTh 8:00am - 8:50am	ONLINE	Discussion
0412	Kendall Williams	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ONLINE	
	TuTh 8:00am - 8:50am	ONLINE	Discussion
0421	Kendall Williams	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ONLINE	
	TuTh 9:00am - 9:50am	ONLINE	Discussion
0422	Kendall Williams	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ONLINE	
	TuTh 9:00am - 9:50am	ONLINE	Discussion
0431	Kendall Williams	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ONLINE	
	TuTh 10:00am - 10:50am	ONLINE	Discussion
0432	Kendall Williams	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ONLINE	
	TuTh 10:00am - 10:50am	ONLINE	Discussion
0441	Kendall Williams	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ONLINE	
	TuTh 11:00am - 11:50am	ONLINE	Discussion
0442	Kendall Williams	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ONLINE	
	TuTh 11:00am - 11:50am	ONLINE	Discussion
0511	David Hamilton	Seats (Total: 28)	
	MWF 3:00pm - 3:50pm	ONLINE	
	TuTh 8:00am - 8:50am	ONLINE	Discussion
0521	David Hamilton	Seats (Total: 28)	
	MWF 3:00pm - 3:50pm	ONLINE	
	TuTh 9:00am - 9:50am	ONLINE	Discussion

0531	David Hamilton MWF 3:00pm - 3:50pm TuTh 10:00am - 10:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0541	David Hamilton MWF 3:00pm - 3:50pm TuTh 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion

MATH241H **Calculus III**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH241 or MATH340.

Introduction to multivariable calculus, including vectors and vector-valued functions, partial derivatives and applications of partial derivatives (such as tangent planes and Lagrange multipliers), multiple integrals, volume, surface area, and the classical theorems of Green, Stokes and Gauss.

For general honors students only. MATH241H will use MATLAB.

0101	Antonio De Rosa MF 10:00am - 10:50am W 10:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	
0201	Zehua Zhao MF 11:00am - 11:50am W 11:00am - 12:50pm	Seats (Total: 25) ONLINE ONLINE	
0301	Kendall Williams MF 1:00pm - 1:50pm W 1:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	
0401	Wiseley Wong MF 2:00pm - 2:50pm W 2:00pm - 3:50pm	Seats (Total: 25) ONLINE ONLINE	

MATH246 **Differential Equations for Scientists and Engineers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH246 or MATH341.

An introduction to the basic methods of solving ordinary differential equations. Equations of first and second order, linear differential equations, Laplace transforms, numerical methods and the qualitative theory of differential equations.

All sections will use MATLAB.

0111	Jonathan Rosenberg MWF 9:00am - 9:50am Tu 8:00am - 8:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0121	Jonathan Rosenberg MWF 9:00am - 9:50am Tu 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0122	Jonathan Rosenberg MWF 9:00am - 9:50am Tu 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0131	Jonathan Rosenberg MWF 9:00am - 9:50am Tu 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0132	Jonathan Rosenberg MWF 9:00am - 9:50am Tu 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0141	Jonathan Rosenberg MWF 9:00am - 9:50am Tu 12:00pm - 12:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0211	Matei Machedon MWF 11:00am - 11:50am Th 8:00am - 8:50am	Seats (Total: 26) ONLINE ONLINE	 Discussion
0221	Matei Machedon MWF 11:00am - 11:50am Th 9:00am - 9:50am	Seats (Total: 26) ONLINE ONLINE	 Discussion
0231	Matei Machedon MWF 11:00am - 11:50am Th 10:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	 Discussion

0241	Matei Machedon MWF 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0411	Ruiwen Shu TuTh 12:30pm - 1:45pm F 8:00am - 8:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0421	Ruiwen Shu TuTh 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0431	Ruiwen Shu TuTh 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 28) ONLINE ONLINE	Discussion
0441	Ruiwen Shu TuTh 12:30pm - 1:45pm F 12:00pm - 12:50pm	Seats (Total: 26) ONLINE ONLINE	Discussion
0511	Charles Levermore TuTh 2:00pm - 3:15pm W 8:00am - 8:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0512	Charles Levermore TuTh 2:00pm - 3:15pm W 8:00am - 8:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0513	Charles Levermore TuTh 2:00pm - 3:15pm W 8:00am - 8:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0521	Charles Levermore TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	Discussion
0522	Charles Levermore TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	Discussion

0523	Charles Levermore TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0531	Charles Levermore TuTh 2:00pm - 3:15pm W 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0532	Charles Levermore TuTh 2:00pm - 3:15pm W 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0533	Charles Levermore TuTh 2:00pm - 3:15pm W 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0601	Alice Wang TuTh 9:30am - 10:45am	Seats (Total: 24) ONLINE	

MATH246H **Differential Equations for Scientists and Engineers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH246 or MATH341.

An introduction to the basic methods of solving ordinary differential equations. Equations of first and second order, linear differential equations, Laplace transforms, numerical methods and the qualitative theory of differential equations.

For general honors students only. MATH241H will use MATLAB.

0101	Rodrigo Trevino TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE

MATH274 **History of Mathematics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: IE

Prerequisite: MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220.

An overview of aspects in the history of mathematics from its beginning in the concrete problem solving of ancient times through the development of abstraction in the 19th and 20th centuries. The course considers both mathematical ideas and the context in which they developed in various civilizations around the world.

0101	Yanir Rubinstein	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

MATH299A **Selected Topics in Mathematics; Special Topics in Study Abroad II: Introduction to Mathematical Computing**

Credits: 3 Grading Method: Regular

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

Contact department for information to register for this course.

MATH299B **Selected Topics in Mathematics; Putnam Express**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

0101	Roohollah Ebrahimian	Seats (Total: 20)
	W 4:00pm - 5:30pm	ONLINE

MATH299M **Selected Topics in Mathematics; Visualization through Mathematica**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

Prerequisites: MATH140 and MATH141 (or equivalent).

0101	Pedram Sadeghian	Seats (Total: 30)
	F 1:00pm - 1:50pm	ONLINE

MATH310 **Introduction to Mathematical Proof**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH141; and must have completed or be concurrently enrolled in MATH240, MATH341, or MATH461; and must have completed or be concurrently enrolled in MATH241 or MATH340. Restriction: Must be in a major within the CMNS-Mathematics department. Credit only granted for: MATH307 or MATH310. Additional information: Math majors may not use this course to satisfy an upper-level requirement.

To develop the students' ability to construct a rigorous proof of a mathematical claim. Students will also be made aware of mathematical results that are of interest to those wishing to analyze a particular mathematical model. Topics will be drawn from logic, set theory, structure of the number line, elementary topology, metric spaces, functions, sequences and continuity.

0101	Mestiyage Gunatilleka MWF 10:00am - 10:50am	Seats (Total: 34) ONLINE
0201	Kathryn Truman MWF 11:00am - 11:50am	Seats (Total: 34) ONLINE
0301	Nathan Manning MWF 12:00pm - 12:50pm	Seats (Total: 34) ONLINE
0401	Rodrigo Trevino TuTh 11:00am - 12:15pm	Seats (Total: 32) ONLINE

MATH314 **Introduction to Probability, Data, Analysis and Statistics for Preservice Middle School Teachers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH214. Restriction: Must be in one of the following programs (Elementary Education; Special Education; Middle School Education). Credit only granted for: MATH314 or STAT100.

Analysis of bivariate data, probability and randomness, law of large numbers, central limit theorem, probabilities for independent and dependent events, counting techniques, random variables and probability distributions, expected values, sampling distributions, and confidence intervals.

0101	Peter Moon TuTh 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

MATH315 **Algebra for Preservice Middle School Teachers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH212. Restriction: Must be in one of the following programs (Elementary Education; Special Education; Middle School Education). Credit only granted for: MATH112, MATH113, or MATH315.

Algebraic concepts and techniques developed in the middle grades, with their larger mathematical context. Equations, inequalities and functions (linear, polynomial, exponential, logarithmic), with multiple representations of relationships. Common misconceptions of beginning algebra students.

0101	Carolina Napp-Avelli MW 2:00pm - 3:15pm	Seats (Total: 24) ONLINE

MATH340 **Multivariable Calculus, Linear Algebra and Differential Equations I (Honors)**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH141 and MATH140; and permission of CMNS-Mathematics department; and permission will be granted only to incoming freshmen. Credit only granted for: MATH241 or MATH340.

First semester of the MATH340-341 sequence which gives a unified and enriched treatment of multivariable calculus, linear algebra and ordinary differential equations, with supplementary material from subjects such as differential geometry, Fourier series and calculus of variations. Students completing MATH340-341 will have covered the material of MATH240, MATH241, and MATH246, and may not also receive credit for MATH240, MATH241 or MATH246.

0101	Roohollah Ebrahimian MWF 10:00am - 11:15am	Seats (Total: 30) ONLINE
0201	Niranjan Ramachandran MWF 12:00pm - 1:15pm	Seats (Total: 30) ONLINE

MATH386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Must have learning proposal approved by the CMNS Mathematics Department.

Contact department for information to register for this course.

MATH401 **Applications of Linear Algebra**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH461, MATH240, MATH341).

Various applications of linear algebra: theory of finite games, linear programming, matrix methods as applied to finite Markov chains, random walk, incidence matrices, graphs and directed graphs, networks and transportation problems.

0101	Justin Wyss-Gallifent MWF 9:00am - 9:50am	Seats (Total: 40) ONLINE
0201	Allan Yashinski MWF 10:00am - 10:50am	Seats (Total: 35) ONLINE
0301	Justin Wyss-Gallifent MWF 11:00am - 11:50am	Seats (Total: 40) ONLINE
0401	Zehua Zhao MWF 2:00pm - 2:50pm	Seats (Total: 35) ONLINE
0501	Michael Jakobson TuTh 9:30am - 10:45am	Seats (Total: 35) ONLINE
0601	Ricardo Nochetto TuTh 2:00pm - 3:15pm	Seats (Total: 35) ONLINE

MATH402 **Algebraic Structures**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461). Restriction: Must not be in any of the following programs (Mathematics (Master's); Mathematics (Doctoral)). Credit only granted for: MATH402 or MATH403.

For students having only limited experience with rigorous mathematical proofs. Parallels MATH403. Students planning graduate work in mathematics should take MATH403. Groups, rings, integral domains and fields, detailed study of several groups; properties of integers and polynomials. Emphasis is on the origin of the mathematical ideas studied and the logical structure of the subject.

0101	Steven Chadwick MWF 1:00pm - 1:50pm	Seats (Total: 32) ONLINE

MATH403 **Introduction to Abstract Algebra**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH340); and 1 course with a minimum grade of C- from (MATH341, MATH241); and minimum grade of C- in MATH310. Or students who have taken courses with comparable content may contact the department. Credit only granted for: MATH402 or MATH403.

Integers; groups, rings, integral domains, fields.

0101	Patrick Brosnan MWF 10:00am - 10:50am	Seats (Total: 31) ONLINE
0201	Allan Yashinski MWF 12:00pm - 12:50pm	Seats (Total: 31) ONLINE

MATH405 **Linear Algebra**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and minimum grade of C- in MATH310.

An abstract treatment of finite dimensional vector spaces. Linear transformations and their invariants.

0101	Yihang Zhu MWF 12:00pm - 12:50pm	Seats (Total: 31) ONLINE
0201	Giovanni Forni TuTh 11:00am - 12:15pm	Seats (Total: 31) ONLINE

MATH406 **Introduction to Number Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH241, MATH246, MATH340, MATH341, MATH461); or permission of CMNS-Mathematics department.

Integers, divisibility, prime numbers, unique factorization, congruences, quadratic reciprocity, Diophantine equations and arithmetic functions.

0101	Nathan Manning MWF 10:00am - 10:50am	Seats (Total: 34) ONLINE
0201	Niranjan Ramachandran MWF 11:00am - 11:50am	Seats (Total: 34) ONLINE

0301	Yordanka Kovacheva MWF 12:00pm - 12:50pm	Seats (Total: 34) ONLINE

MATH410 **Advanced Calculus I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241); and minimum grade of C- in MATH310. Or students who have taken courses with comparable content may contact the department.

First semester of a year course. Subjects covered during the year are: sequences and series of numbers, continuity and differentiability of real valued functions of one variable, the Riemann integral, sequences of functions and power series. Functions of several variables including partial derivatives, multiple integrals, line and surface integrals. The implicit function theorem.

0101	Denny Gulick MWF 10:00am - 10:50am	Seats (Total: 35) ONLINE
0201	Antoine Mellet, Doron Levy, Charles Levermore MWF 11:00am - 11:50am	Seats (Total: 35) ONLINE
0301	Archana Khurana MWF 12:00pm - 12:50pm	Seats (Total: 35) ONLINE
0401	Sandra Cerrai MWF 1:00pm - 1:50pm	Seats (Total: 35) ONLINE
0501	Stefan Doboszczak MWF 2:00pm - 2:50pm	Seats (Total: 35) ONLINE
0601	Patrick Fitzpatrick TuTh 9:30am - 10:45am	Seats (Total: 35) ONLINE

MATH411 **Advanced Calculus II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH410; and permission of CMNS-Mathematics department. Credit only granted for: MATH411 or MATH412.

Continuation of MATH410.

0101	Kendall Williams MWF 11:00am - 11:50am	Seats (Total: 25) ONLINE
0201	Matei Machedon MWF 1:00pm - 1:50pm	Seats (Total: 30) ONLINE

MATH416 **Applied Harmonic Analysis: An Introduction to Signal Processing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141; and 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and familiarity with MATLAB is required.

Introduces students to the mathematical concepts arising in signal analysis from the applied harmonic analysis point of view. Topics include applied linear algebra, Fourier series, discrete Fourier transform, Fourier transform, Shannon Sampling Theorem, wavelet bases, multiresolution analysis, and discrete wavelet transform.

0101	Wojciech Czaja MWF 9:00am - 9:50am	Seats (Total: 25) ONLINE

MATH424 **Introduction to the Mathematics of Finance**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141; and 1 course with a minimum grade of C- from (STAT400, STAT410); and permission of CMNS-Mathematics department. Recommended: MATH246, MATH240, MATH241, MATH340, or MATH341. Credit only granted for: BMGT444, MATH424.

Introduction to the mathematical models used in finance and economics with emphasis on pricing derivative instruments. Designed for students in mathematics, computer science, engineering, finance and physics. Financial markets and instruments; elements from basic probability theory; interest rates and present value analysis; normal distribution of stock returns; option pricing; arbitrage pricing theory; the multiperiod binomial model; the Black-Scholes option pricing formula; proof of the Black-Scholes option pricing formula and applications; trading and hedging of options; Delta hedging; utility functions and portfolio theory; elementary stochastic calculus; Ito's Lemma; the Black-Scholes equation and its conversion to the heat equation.

0101	Guangyu Xi TuTh 9:30am - 10:45am	Seats (Total: 28) ONLINE

MATH430 **Euclidean and Non-Euclidean Geometries**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461).

Hilbert's axioms for Euclidean geometry. Neutral geometry: the consistency of the hyperbolic parallel postulate and the inconsistency of the elliptic parallel postulate with neutral geometry. Models of hyperbolic geometry. Existence and properties of isometries.

0101	Terence Long	Seats (Total: 34)
	MWF 12:00pm - 12:50pm	ONLINE

MATH431 **Geometry for Computer Applications**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH461, MATH240, MATH341).

Topics from projective geometry and transformation geometry, emphasizing the two-dimensional representation of three-dimensional objects and objects moving about in the plane and space. The emphasis will be on formulas and algorithms of immediate use in computer graphics.

0101	William Goldman	Seats (Total: 34)
	TuTh 12:30pm - 1:45pm	ONLINE

MATH432 **Introduction to Topology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH410.

Metric spaces, topological spaces, connectedness, compactness (including Heine-Borel and Bolzano-Weierstrass theorems), Cantor sets, continuous maps and homeomorphisms, fundamental group (homotopy, covering spaces, the fundamental theorem of algebra, Brouwer fixed point theorem), surfaces (e.g., Euler characteristic, the index of a vector field, hairy sphere theorem), elements of combinatorial topology (graphs and trees, planarity, coloring problems).

0101	James Schafer	Seats (Total: 24)
	TuTh 9:30am - 10:45am	ONLINE

MATH436 **Differential Geometry of Curves and Surfaces I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (MATH461, MATH240, MATH341); and must have completed two 400-level MATH courses with a minimum grade of C- (not including MATH461, 478, and 480's).

Curves in the plane and Euclidean space, moving frames, surfaces in Euclidean space, orientability of surfaces; Gaussian and mean curvatures; surfaces of revolution, ruled surfaces, minimal surfaces, special curves on surfaces, "Theorema Egregium"; the intrinsic geometry of surfaces.

0101	Jonathan Rosenberg	Seats (Total: 20)
	MWF 11:00am - 11:50am	ONLINE

MATH445 **Elementary Mathematical Logic**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141.

Elementary development of propositional and predicate logic, including semantics and deductive systems and with a discussion of completeness, incompleteness and the decision problem.

0101	Roohollah Ebrahimian	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	ONLINE

MATH452 **Introduction to Dynamics and Chaos**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH341. Or MATH246; and (MATH240 or MATH461). Also offered as: AMSC452. Credit only granted for: AMSC452 or MATH452.

An introduction to mathematical dynamics and chaos. Orbits, bifurcations, Cantor sets and horseshoes, symbolic dynamics, fractal dimension, notions of stability, flows and chaos. Includes motivation and historical perspectives, as well as examples of fundamental maps studied in dynamics and applications of dynamics.

0101	Agnieszka Zelerowicz	Seats (Total: 28)
	TuTh 9:30am - 10:45am	ONLINE

MATH456 **Cryptography**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: (CMSC106, CMSC131, or ENEE150; or equivalent programming experience); and (2 courses from (CMSC330, CMSC351, ENEE324, or ENEE380); or any one of these courses and a 400-level MATH course, or two 400-level MATH courses). Or permission of instructor. Also offered as: CMSC456, ENEE456. Credit only granted for: MATH456, CMSC456 or ENEE456.

The theory, application, and implementation of mathematical techniques used to secure modern communications. Topics include symmetric and public-key encryption, message integrity, hash functions, block-cipher design and analysis, number theory, and digital signatures.

0101	Jeffrey Adams MWF 11:00am - 11:50am	Seats (Total: 50) ONLINE	
0201	William Gasarch MW 3:30pm - 4:45pm	Seats (Total: 85) ONLINE	

MATH461 **Linear Algebra for Scientists and Engineers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141; and must have completed any MATH or STAT course with a prerequisite of MATH141. Credit only granted for: MATH240, MATH341, or MATH461. Additional information: This course may not be used towards the upper level math requirements for MATH/STAT majors.

Basic concepts of linear algebra. This course is similar to MATH 240, but with more extensive coverage of the topics needed in applied linear algebra: change of basis, complex eigenvalues, diagonalization, the Jordan canonical form.

0111	Terence Long MWF 1:00pm - 1:50pm Tu 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0112	Terence Long MWF 1:00pm - 1:50pm Tu 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0121	Terence Long MWF 1:00pm - 1:50pm Tu 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0122	Terence Long MWF 1:00pm - 1:50pm Tu 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

0131	Terence Long MWF 1:00pm - 1:50pm Tu 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0132	Terence Long MWF 1:00pm - 1:50pm Tu 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0211	Xuemiao Chen TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE	

MATH462 **Partial Differential Equations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (MATH246, MATH341).

Linear spaces and operators, orthogonality, Sturm-Liouville problems and eigenfunction expansions for ordinary differential equations. Introduction to partial differential equations, including the heat equation, wave equation and Laplace's equation. Boundary value problems, initial value problems and initial-boundary value problems.

0101	Manoussos Grillakis MWF 12:00pm - 12:50pm	Seats (Total: 28) ONLINE
0201	Konstantina Trivisa TuTh 11:00am - 12:15pm	Seats (Total: 28) ONLINE

MATH463 **Complex Variables**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH241, MATH340).

The algebra of complex numbers, analytic functions, mapping properties of the elementary functions. Cauchy integral formula. Theory of residues and application to evaluation of integrals. Conformal mapping.

0101	David Hamilton MWF 1:00pm - 1:50pm	Seats (Total: 28) ONLINE

0102	Antoine Mellet	Seats (Total: 28)
	TuTh 2:00pm - 3:15pm	ONLINE

MATH464 **Transform Methods for Scientists and Engineers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH246, MATH341).

Fourier transform, Fourier series, discrete fast Fourier transform (DFT and FFT). Laplace transform. Poisson summations, and sampling. Optional Topics: Distributions and operational calculus, PDEs, Wavelet transform, Radon transform and applications such as Imaging, Speech Processing, PDEs of Mathematical Physics, Communications, Inverse Problems.

0101	Radu Balan	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	ONLINE

MATH475 **Combinatorics and Graph Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and permission of CMNS-Mathematics department. Cross-listed with CMSC475. Credit only granted for: MATH475 or CMSC475.

General enumeration methods, difference equations, generating functions. Elements of graph theory, matrix representations of graphs, applications of graph theory to transport networks, matching theory and graphical algorithms.

0101	Wiseley Wong	Seats (Total: 40)
	MWF 10:00am - 10:50am	ONLINE

MATH489 **Research Interactions in Mathematics; Research Interactions in Mathematics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) mathematics research group. Format varies. Students and supervising faculty will agree to a contract which must be approved by the department. Up to three credits of MATH489 may be applied to the mathematics degree requirements. See the department's MATH489 online syllabus for further information.

Contact department for information to register for this course.

MATH498A **Selected Topics in Mathematics**

(Perm req)

Credits: 1-9 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduate students will be offered occasionally under the general guidance of the departmental committee on undergraduate studies.

Contact department for information to register for this course.

MATH600 **Abstract Algebra I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH405 and MATH403; or students who have taken courses with comparable content may contact the department.

Groups with operators, homomorphism and isomorphism theorems, normal series, Sylow theorems, free groups, Abelian groups, rings, integral domains, fields, modules. Topics may include HOM (A,B), Tensor products, exterior algebra.

Offered fall only.

0101	Jeffrey Adams	Seats (Total: 24)
	MWF 10:00am - 10:50am	ONLINE

MATH606 **Algebraic Geometry I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH600 and MATH601.

Prime and primary ideals in Noetherian rings, Hilbert Nullstellensatz, places and valuations, prevarieties (in the sense of Serre), dimension, morphisms, singularities, varieties, schemes, rationality.

0101	Amin Gholampour	Seats (Total: 20)
	MWF 9:00am - 9:50am	ONLINE

MATH630 **Real Analysis I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH411; or students who have taken courses with comparable content may contact the department.

Lebesgue measure and the Lebesgue integral on R, differentiation of functions of bounded variation, absolute continuity and fundamental theorem of calculus, Lp spaces on R, Riesz-Fischer theorem, bounded linear functionals on Lp, measure and outer measure, Fubini's theorem.

0101	Wojciech Czaja	Seats (Total: 30)
	MWF 11:00am - 11:50am	ONLINE

MATH632 **Functional Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH631.

Introduction to functional analysis and operator theory: normed linear spaces, basic principles of functional analysis, bounded linear operators on Hilbert spaces, spectral theory of selfadjoint operators, applications to differential and integral equations, additional topics as time permits.

0101	Radu Balan	Seats (Total: 18)
	TuTh 11:00am - 12:15pm	ONLINE

MATH642 **Dynamical Systems I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH432. And MATH630; or students who have taken courses with comparable content may contact the department.

Foundations of topological dynamics, homeomorphisms, flows, periodic and recurrent points, transitivity and minimality, symbolic dynamics. Elements of ergodic theory, invariant measures and sets, ergodicity, ergodic theorems, mixing, spectral theory, flows and sections. Applications of dynamical systems to number theory, the Weyl theorem, the distribution of values of polynomials, Vander Waerden's theorem on arithmetic progressions.

0101	Adam Kanigowski	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

MATH670 **Ordinary Differential Equations I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH405. And MATH410; or students who have taken courses with comparable content may contact the department. Cross-listed with A MSC670. Credit only granted for: AMSC670 or MATH670.

Existence and uniqueness, linear systems usually with Floquet theory for periodic systems, linearization and stability, planar systems usually with Poincare-Bendixson theorem.

0101	Vadim Kaloshin	Seats (Total: 18)
	TuTh 12:30pm - 1:45pm	ONLINE

MATH673 **Partial Differential Equations I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH411; or students who have taken courses with comparable content may contact the department. Cross-listed with AMSC67 3. Credit only granted for: AMSC673 or MATH673.

Analysis of boundary value problems for Laplace's equation, initial value problems for the heat and wave equations. Fundamental solutions, maximum principles, energy methods. First order nonlinear PDE, conservation laws. Characteristics, shock formation, weak solutions. Distributions, Fourier transform.

Offered fall only.

0101	Dionisios Margetis	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

MATH689 **Research Interactions in Mathematics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

The students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) research group. Format varies, but includes regular meetings, readings and presentations of material. See graduate program's online syllabus or contact the graduate program director for more information.

Contact department for information to register for this course.

MATH695 **Teaching Seminar**

Credits: 1 Grading Method: Regular

Restriction: Must be in one of the following programs (Mathematics (Doctoral); Mathematics (Master's); Mathematical Statistics (Doctoral); Applied Mathematics and Scientific Computation (Master's); Mathematical Statistics (Master's); Applied Mathematics and Scientific Computation (Doctoral)).

A course intended for first year teaching assistants. Topics include: everyday mechanics of teaching; teaching methods and styles; technology; course enrichment, diversity in the classroom; sexual harassment; teacher-student interactions; presentations by students.

0101	Terence Long	Seats (Total: 20)
	W 4:00pm - 5:30pm	Location: TBA

MATH712 **Mathematical Logic I**

Credits: 3 Grading Method: Regular, Audit

Sentential logic, first-order languages, models and formal deductions. Basic model theory including completeness and compactness theorems, other methods of constructing models, and applications such as non-standard analysis.

0101	Samuel Braunfeld	Seats (Total: 15)
	MWF 1:00pm - 1:50pm	ONLINE

MATH730 **Fundamental Concepts of Topology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH403, MATH410, and MATH411; or students who have taken courses with comparable content may contact the department.

Survey of basic point set topology, fundamental group, covering spaces, Van Kampen's theorem, simplicial complexes, simplicial homology, Euler characteristics and classification of surfaces.

0101	Steve Halperin	Seats (Total: 18)
	MWF 9:00am - 9:50am	ONLINE

MATH742 **Geometric Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH673 and MATH674; or MATH740.

Calculus of Variations, Bochner technique, Morse theory, weak solutions and elliptic regularity, maximum principle for elliptic and parabolic equations, Green's function of the Laplacian, isoperimetric and Sobolev inequalities, continuity method, curvature and comparison results, harmonic maps, curvature prescription problems.

0101	Tamas Darvas	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	ONLINE

MATH744 **Lie Groups I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH405, MATH403, MATH411, and MATH432; or students who have taken courses with comparable content may contact the department.

An introduction to the fundamentals of Lie groups, including some material on groups of matrices and Lie algebras.

0101	William Goldman	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

MATH799 Master's Thesis Research

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MATH808A Selected Topics in Algebra

Credits: 1-3 Grading Method: Regular

Advanced topics of current interest.

Contact department for information to register for this course.

MATH808F Selected Topics in Algebra; Modular Forms

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

0101	Jingren Chi	Seats (Total: 20)
	MWF 10:00am - 10:50am	ONLINE

MATH818A Selected Topics in Logic

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

MATH848A Selected Topics in Geometry and Topology

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

MATH848Y **Selected Topics in Geometry and Topology; Topics in Differential Geometry**

Credits: 1-3 Grading Method: Regular, Audit, Sat-Fail

Advanced topics of current interest.

0101	Yanir Rubinstein	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

MATH858A **Selected Topics in Analysis**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

MATH868A **SelectedTopics in Complex Analysis**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

MATH868C **SelectedTopics in Complex Analysis**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

0101	Richard Wentworth	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

MATH898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

MATH899 **Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MEES Marine-Estuarine-Environmental Sciences Fall 2020

MEES498I Topics in Marine-Estuarine-Environmental Sciences; Chesapeake Bay Health

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lecture and/or laboratory series organized to study a selected area of marine-estuarine-environmental sciences not otherwise considered in formal courses.

Jointly offered with MEES698I. Credit only granted for MEES498I or MEES6 98I. Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN).

0101	Carys Mitchelmore	Seats (Total: 20)	
	MW 11:00am - 12:30pm	ONLINE	

MEES607 Quantitative Methods in Environmental Sciences

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH120 and MATH121; or must have completed MATH220 and MATH221; or students who have taken courses with comparable content may contact the department. Credit only granted for: MEES607 or MEES698G. Formerly: MEES698G.

Mathematical approaches and solutions (both analytical and numerical) that cut across environmental disciplines, and will introduce analytical techniques.

Taught at the Chesapeake Biological Laboratory and on the Interactive Video Network.

0101	Hongsheng Bi, Larry Sanford	Seats (Total: 20)	
	TuTh 9:30am - 10:50am	ONLINE	
	F 11:00am - 11:50am	ONLINE	Discussion

MEES608B Seminar in Marine-Estuarine-Environmental Sciences; Responsible Conduct of Research

Credits: 1 Grading Method: Regular, Audit

Taught over the Interactive Video Network (IVN)

0101	Russell Hill, Thomas Miller	Seats (Total: 30)
	Tu 2:00pm - 3:20pm	ONLINE

MEES608D **Seminar in Marine-Estuarine-Environmental Sciences; Scientific Writing and Communication**

Credits: 2 Grading Method: Regular, Audit

Taught at the Horn Point Laboratory and on the Interactive Video Network.

0101	Elizabeth North	Seats (Total: 24)
	F 9:00am - 10:50am	ONLINE

MEES608E **Seminar in Marine-Estuarine-Environmental Sciences; Marine Disease Ecology**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

0101	Colleen Burge, Eric Schott	Seats (Total: 20)
	Th 8:30am - 9:30am	ONLINE

MEES608O **Seminar in Marine-Estuarine-Environmental Sciences; Topics in OMICS**

Credits: 1 Grading Method: Regular, Audit

Taught over the Interactive Video Network (IVN).

0101	Shao Du	Seats (Total: 20)
	F 12:00pm - 12:50pm	ONLINE

MEES608R **Seminar in Marine-Estuarine-Environmental Sciences; Applied Bayesian Statistics**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

0101	Dong Liang	Seats (Total: 20)
	Th 12:30pm - 1:20pm	ONLINE

MEES614 **Landscape Ecology**

Credits: 4 Grading Method: Regular, Sat-Fail

Restriction: Permission of instructor.

Many ecological questions in terrestrial and marine systems originate from the observation that organisms and the ecological processes that influence them vary in space. This course emphasizes the study of spatial ecological patterns (including animal movement), the processes that generate and maintain these patterns and processes, and the construction of models in R to analyze, simulate, and understand the interplay between spatial pattern, ecological processes, and scale. The objective of the course is to introduce students to ecological theories and concepts relevant to the study of spatial ecological patterns in terrestrial and marine systems, while providing the R skills necessary to articulate and answer scientific questions by confronting models with data.

0101	Helen Olde, Matthew Fitzpatrick	Seats (Total: 20)	
	TuTh 12:30pm - 1:50pm	ONLINE	
	F 3:00pm - 3:50pm	ONLINE	Discussion

MEES620 **Environment and Society**

Credits: 3 Grading Method: Regular, Audit

Additional information: Offered over the interactive video network.

Students will obtain foundational knowledge of core theories and methods that integrate cultural and socio-economic research into environmental science. Key topics include: coupled natural and human systems, cultural models of the environment, social networks, ecological economics, political ecology, environmental justice, and science communication.

Cross-listed with ANTH620. Credit only granted for ANTH620 or MEES620.

0101	William Dennison, Kenneth Rose, Elizabeth Van Dolah	Seats (Total: 20)
	Th 2:00pm - 4:45pm	ONLINE

MEES640 **Interconnected Earth Systems:Land, Ocean, and Estuary**

Credits: 3 Grading Method: Regular, Audit

Explores the interconnected physical and biogeochemical systems of land, estuary, and ocean with cross cutting themes of human impacts and global change. Broad concepts will be combined with targeted interactive case studies to demonstrate how these systems are linked by humans, climate, and water.

0101	Keith Eshleman, Victoria Coles, Michael Gonsior, Laura Lapham, Mark Castro, Cindy Palinkas	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

MEES660 **Ecological Systems**

Credits: 3 Grading Method: Regular, Audit

An introduction to the field of ecology is provided for matriculating graduate students and prepares them for more advanced concepts. Students will be exposed to ecology both in theory and practice through lectures, readings, and quantitative exercises, round table debates and discussions with current practitioners.

0101	Ryan Woodland, Mark Cochrane, Lora Harris, Christopher Rowe, Robert Hilderbrand	Seats (Total: 20)
	MW 12:30pm - 1:50pm	ONLINE

MEES663 **Ecological Genomics**

Credits: 3 Grading Method: Regular, Audit

New technologies in genomics, especially next-generation sequencing, have revolutionized the fields of ecology and evolutionary biology across all hierarchical levels of biological organization. Within virtually any species, we can now study genetic diversity and gene expression across the entire genome to understand adaptation to current environments and responses to global change. In multi-species contexts, we now have the tools to understand the importance of interspecific gene flow in adaptation, determine the role of genetic diversity in community composition, and characterize the diversity and function of cryptic organisms, such as microbes, in communities and ecosystems. This course will cover the major research topics in ecological genomics, considering individual, population, interspecific, and community and ecosystem hierarchical levels. The course will comprise lectures, student-led discussions of primary literature exemplifying applications of genomics to contemporary environmental problems, and hands-on experience manipulating and analyzing real genomic data sets with the latest bioinformatic tools in the UNIX/Linux and R environments.

0101	Clara Fuchsman, Louis Plough	Seats (Total: 20)
	MW 3:30pm - 4:45pm	ONLINE

MEES680 **Cell and Molecular Biology for the Environmental Scientist- From Genes to Ecosystems**

Credits: 3 Grading Method: Regular, Audit

Introduces environmental scientists to the methods and approaches that are the foundations for today's breakthroughs in molecular and cellular biology. Detailed examination of papers published in the last few years along with online background materials will be used to reinforce the connection of key concepts to experimentation.

0101	Allen Place, Yantao Li MW 8:00am - 9:20am	Seats (Total: 20) ONLINE

MEES682 **Fishery Science and Management**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Restriction: Permission of instructor.

Aquatic production and fisheries yields. Introduction to fish population dynamics and assessment methods. Effects of fishing on resource potential yields. Causes of fluctuations in resource abundance. An emphasis on the relationship between science and management.

0101	Michael Wilberg, Genevieve Nesslage MW 2:00pm - 3:30pm	Seats (Total: 20) ONLINE

MEES698B **Special Topics in Marine-Estuarine-Environmental Sciences; Environmental Statistics I**

Credits: 3 Grading Method: Regular, Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Taught at the Chesapeake Biological Laboratory and on the Interactive Video Network.

0101	Viacheslav Lyubchich MW 9:30am - 10:50am	Seats (Total: 35) ONLINE

MEES698E **Special Topics in Marine-Estuarine-Environmental Sciences; Ecosystem Restoration**

Credits: 3 Grading Method: Regular, Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Jointly offered with GEOL453 and GEOL789L. Overview of critical ecosyste m functions across biomes/geologic settings emphasizing tradeoffs in restoration designs. Case studies illuminate structure's influence over biophysical and biogeochemical processes supporting ecosystems; the n show how properties of physical, chemical, and ecosystem processes can be altered by different restoration strategies, to optimize ecosyst em services and habitat quality. Includesa semester research project.

0101	Sujay Kaushal	Seats (Total: 20)
	Tu 3:30pm - 6:30pm	ARM 0135

MEES698I **Special Topics in Marine-Estuarine-Environmental Sciences; Chesapeake Bay Health**

Credits: 3 Grading Method: Regular, Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Jointly offered with MEES498I. Credit only granted for MEES498I or MEES6 98I. Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN).

0101	Carys Mitchelmore	Seats (Total: 20)
	MW 11:00am - 12:30pm	ONLINE

MEES698M **Special Topics in Marine-Estuarine-Environmental Sciences; Modeling Chemical Equilibrium in Natural Waters**

Credits: 3 Grading Method: Regular, Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Taught over the Interactive Video Network (IVN).

0101	kilbo Schijf	Seats (Total: 20)
	MW 8:00am - 9:20am	ONLINE

MEES699 **Special Problems in Marine-Estuarine-Environmental Sciences**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Research on specialized topics under the direction of individual faculty members.

Contact department for information to register for this course.

MEES708X **Advanced Topics in Marine-Estuarine-Environmental Science; R Programming - Part 1 (Basic)**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Lectures, experimental courses and other specialized graduate training in various relevant disciplines.

0101	Viacheslav Lyubchich	Seats (Total: 30)
	Meets August 31, 2020 - October 20, 2020	
	Tu 3:30pm - 5:20pm	ONLINE

MEES708Y **Advanced Topics in Marine-Estuarine-Environmental Science; R Programming - Part 2 (Advanced)**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Lectures, experimental courses and other specialized graduate training in various relevant disciplines.

0101	Viacheslav Lyubchich	Seats (Total: 30)
	Meets October 27, 2020 - December 14, 2020	
	Tu 3:30pm - 5:20pm	ONLINE

MEES718G **Study Groups on Issues in Marine Estuarine Enviornmental Sciences; Synthesizing Oceanographic Data: Case Study on the Southern Mid-Atlantic Bight**

Credits: 1-3 Grading Method: Regular, Audit

Active discussions on current environmental topics and issues. Efforts may result in manuscripts, technical report or innovative communication products.

0101	Judith O'Neil, Jian Zhao, Gregory Silsbe	Seats (Total: 20)
	F 1:00pm - 2:50pm	ONLINE

MEES799 **Masters Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MEES898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

MEES899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MIEH Maryland Institute for Applied Environmental Health Fall 2020

MIEH300 **A Public Health Perspective: Introduction to Environmental Health**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132; and must have completed or be concurrently enrolled in SPHL100 or PHSC300. Restriction: Must have earned a minimum of 60 credits. Credit only granted for: SPHL498N or MIEH300. Formerly: SPHL498N.

Environmental health is that branch of public health that deals with the human health effects of exposure to chemical, physical, and biological agents in the community, workplace, and home. Activities within Environmental Health Sciences are associated with recognizing, assessing, understanding, and mitigating the impacts of chemical, physical, and biological agents as well as understanding how human behavior and action impacts the environment. This course focuses on the central concepts, principles, issues, and applications of the essential scientific components and strategies of control of major environmental health problems.

While this course is listed as "Blended Learning," there is no requirement to be physically present for the in-person activities; instructors are prepared to accommodate all students through virtual learning options.

0101	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am W 10:00am - 11:50am	ONLINE SPH 0116A	Discussion
	Restricted to College Park students in the Public Health Science major.		
0102	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am W 12:00pm - 1:50pm	ONLINE SPH 0116A	Discussion
	Restricted to College Park students in the Public Health Science major.		
0103	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am W 2:00pm - 3:50pm	ONLINE SPH 0116A	Discussion
	Restricted to College Park students in the Public Health Science major.		
0104	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am W 4:00pm - 5:50pm	ONLINE SPH 0116A	Discussion
	Restricted to College Park students in the Public Health Science major.		

0105	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am F 8:00am - 9:50am	ONLINE SPH 0116A	Discussion
	Restricted to College Park students in the Public Health Science major.		
0106	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am F 10:00am - 11:50am	ONLINE SPH 0116A	Discussion
	Restricted to College Park students in the Public Health Science major.		
0107	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am F 12:00pm - 1:50pm	ONLINE SPH 0116A	Discussion
	Restricted to College Park students in the Public Health Science major.		
ESG1	Kendall Bustad	Seats (Total: 30)	
	MW 9:00am - 9:50am F 2:00pm - 3:50pm	ONLINE ONLINE	Discussion
	Restricted to Shady Grove students in the Public Health Science major.		

MIEH309 **Environmental Health Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

This research-based course will provide undergraduates with the opportunity to work closely with one of the faculty researchers in the Maryland Institute for Applied Environmental Health (MIAEH) within the School of Public Health. Our research covers multiple fields within the environmental health sciences (e.g. environmental epidemiology, exposure science, risk assessment, environmental microbiology, environmental microbial genomics, food toxicology, airborne infection transmission, environmental justice, and children's environmental health) that involve either laboratory-based research or non-laboratory based studies. Students will not only gain invaluable research and interpersonal skills but also contribute to MIAEH's ongoing environmental health research programs.

0201	Paul Turner	Seats (Total: 5)
	Contact instructor or department for details.	
0202	Amir Sapkota	Seats (Total: 5)
	Contact instructor or department for details.	
0203	Amy Sapkota	Seats (Total: 5)
	Contact instructor or department for details.	

0204	Jennifer German, Donald Milton Contact instructor or department for details.	Seats (Total: 25)
0205	Robin Puett Contact instructor or department for details.	Seats (Total: 5)
0206	Sacoby Wilson Contact instructor or department for details.	Seats (Total: 15)
0207	Rachel Goldstein Contact instructor or department for details.	Seats (Total: 5)
0208	Devon Payne-Sturges Contact instructor or department for details.	Seats (Total: 5)
0209	Rianna Murray Contact instructor or department for details.	Seats (Total: 5)
0210	Muhiuddin Haider Contact instructor or department for details.	Seats (Total: 5)

MIEH321 **Environmental Determinants of Emerging Infectious Diseases**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in SPHL100.

Examines the influences of environmental factors, economic development, migration, and land use changes on emergence and reemergence of infectious diseases. Explores how population growth, development, and climate change impact natural reservoirs of infectious diseases and how they are transmitted through human populations. Includes historical accounts, newly emerging and reemerging diseases.

0101	Michael Bazaco W 5:00pm - 7:30pm *Restricted to College Park students in the Public Health Science major.*	Seats (Total: 35) ONLINE

MIEH400 **Introduction to Global Health**

Credits: 3 Grading Method: Regular General Education: DVUP

Prerequisite: Minimum grade of C- in MIEH300; and 1 course with a minimum grade of C- from (SPHL100, PHSC300). Restriction: Must be in the Public Health Science program or must have permission of the program director; and must have completed 60 credits. Credit only granted for: MIEH400 or SPHL498A. Formerly: SPHL498A.

Exploration of theoretical frameworks and practical perspectives on issues shaping the global health panorama. Determinants examined through: biological and epidemiological; social, cultural and economic; environmental and geographic; multi-section, legal and institutional perspectives with synopsis of how these issues are addressed by international and community organizations in developing countries.

Restricted to College Park students in the Public Health Science major.

0101	Amir Sapkota MW 3:00pm - 3:50pm Th 8:00am - 8:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Amir Sapkota MW 3:00pm - 3:50pm Th 9:30am - 10:20am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Amir Sapkota MW 3:00pm - 3:50pm Th 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Amir Sapkota MW 3:00pm - 3:50pm Th 12:30pm - 1:20pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0105	Amir Sapkota MW 3:00pm - 3:50pm Th 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	Amir Sapkota MW 3:00pm - 3:50pm Th 3:30pm - 4:20pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0107	Amir Sapkota MW 3:00pm - 3:50pm F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

MIEH600 Foundations of Environmental Health

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: HLTH761 or MIEH600. Formerly: HLTH761.

Overview of the chemical, physical and biological hazards present in our living and working environment and their effects on human health. Topics include: exposure assessment, industrial hygiene and safety, pesticides, community and indoor pollution, food-borne diseases, solid and hazardous wastes, water resources, risk assessment, ecological issues and environmental laws.

0101	Rachel Goldstein W 10:00am - 12:50pm	Seats (Total: 20) ONLINE

MIEH605 Fundamentals of Global Health

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: SPHL600 or SPHL698A. Formerly: SPHL698A.

Exploration of theoretical frameworks and practicial perspectives in global health with particular attention to the analysis of the biological, epidemiological, social, cultural and behavioral interactions that affect global health study and project implementation. The emphasis is on innovative solutions to health issues in underserved populations.

GH01	Muhiuddin Haider W 5:00pm - 7:00pm Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE

MIEH609 Methods in Environmental Health

Credits: 1-3 Grading Method: Regular

This research-based rotation in environmental health sciences will provide graduate students with the opportunity to work closely with faculty researchers in the Maryland Institute for Applied Environmental Health (MIAEH) within the School of Public Health. Our research covers multiple fields within the environmental health sciences (e.g. environmental epidemiology, exposure science, risk assessment, environmental microbiology, environmental microbiology, environmental microbial genomics, food toxicology, airborne infection transmission, environmental justice, and children's environmental health) that involve either laboratory-based research or non-laboratory based studies. Students will not only gain invaluable research experience and interpersonal skills but also contribute to MIAEH's ongoing environmental health research programs.

0201	Paul Turner Contact instructor or department for details.	Seats (Total: 5)

0202	Amir Sapkota Contact instructor or department for details.	Seats (Total: 5)
0203	Amy Sapkota Contact instructor or department for details.	Seats (Total: 5)
0204	Donald Milton Contact instructor or department for details.	Seats (Total: 5)
0205	Robin Puett Contact instructor or department for details.	Seats (Total: 5)
0206	Sacoby Wilson Contact instructor or department for details.	Seats (Total: 5)
0207	Rachel Goldstein Contact instructor or department for details.	Seats (Total: 5)
0208	Devon Payne-Sturges Contact instructor or department for details.	Seats (Total: 5)

MIEH688 **Seminar in the Maryland Institute for Applied Environmental Health: Current Topics in Environmental Health**

Credits: 1 Grading Method: Sat-Fail

Invited and in-house research presentations from guest scientists, faculty members, and students, and critical analysis of journal articles on current topics in environmental and occupational health.

0101	Donald Milton Tu 11:00am - 11:50am	Seats (Total: 10) ONLINE

MIEH691 **UMD Global STEWARDS: Project-Based Data Practicum at the Nexus of Food, Energy, and Water Systems**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MIEH690,. Restriction: Permission of instructor; and must be in UMD Global STEWARDS Fellows.

The range of food-energy-water (FEW) systems challenges from local to global scales. During the semester, students will gain real-world experience by participating in the conceptualization and/or conduct of an interdisciplinary FEW systems project. Projects may employ engineering, life sciences, epidemiological or policy approaches; earth system sciences frameworks; computational methods; and/or other innovative approaches. Through this work, students will gain hands-on experience in study design, research methods, and data analysis across varying FEW disciplines. Each student will bring a diverse set of expertise to the projects, creating a microcosm for interdisciplinary team science. During the course, students will have the opportunity to refine oral and written communication skills, including team writing. The deliverable for the course may include a grant proposal, a manuscript, a FactSheet, an Op-Ed, or another actionable type of science/policy writing.

0101	Stephanie Lansing	Seats (Total: 15)
	W 2:00pm - 4:45pm	ONLINE

MIEH699 **UMD Global STEWARDS: Seminal Findings, and Research and Policy in Progress at the Food, Energy, Water Nexus**

Credits: 1 Grading Method: Sat-Fail, Audit

Engaging discourse covering seminal findings, as well as research and policy in progress at the food, energy, water (FEW) nexus. Course meetings will include dissections of groundbreaking FEW nexus articles; presentations by faculty members and students, followed by interdisciplinary discussions; and presentations by visiting leaders working at the FEW nexus across career sectors.

0101	Amy Sapkota	Seats (Total: 15)
	W 12:00pm - 1:00pm	ONLINE

MIEH735 **Food Toxicology**

Credits: 3 Grading Method: Regular, Audit

Recommended: BCHM462, BSCI440, or CHEM131. Cross-listed with NFSC735. Credit only granted for: MIEH735 or NFSC735.

An introduction to basic concepts in toxicology in relation to toxic food contaminants and additives; both synthetic and naturally occurring. Focus on exposure routes, molecular targets and susceptible individuals. Also includes regulatory toxicology with respect food toxins.

0101	Robert Buchanan, Paul Turner	Seats (Total: 20)
	W 1:00pm - 3:45pm	ONLINE

MIEH740 **Environmental Health Risk Assessment**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MIEH600; or permission of instructor.

Review of the major methods of human and ecological risk assessment conducted by the U.S. Environment Protection Agency. Emphasis on sources of uncertainty.

0101	Abdel-Razak Kadry	Seats (Total: 15)
	M 4:00pm - 6:45pm	ONLINE

MIEH770 **Law and Policy in Environmental Health**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

Prerequisite: MIEH600; or permission of instructor.

Overview of laws that affect the environment, and the various ways in which businesses are regulated by the government in the interest of protecting the environment. International, Federal, state, and local laws and regulations related to the protection of human health and the regulation of environmental containments, including biological, physical and chemical factors affecting community health. Examination of the interactions between and differing responsibilities of various agencies enforcing environmental laws and regulations.

0101	Devon Payne-Sturges	Seats (Total: 10)
	Th 1:30pm - 4:15pm	ONLINE

MIEH778 **Internship in Public Health**

(Perm req)

Credits: 1-4

Grading Method: Regular, Audit

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

0201	Paul Turner	Seats (Total: 5)
	Contact instructor or department for details.	

MIEH783 **Proposal Development and Marketing for Public Health Scientists**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Every scientist, whether in academia, government, or industry, must write compelling proposals if they are to succeed in having resources to pursue their passions and interests. To write a compelling proposal, we must develop clear and concise hypotheses and definitive ways to test them. But to have an impact, to get funded, to graduate, we must also excel at marketing our ideas and our achievements to other scientists and the public. This course is designed for doctoral students and postdoctoral fellows who want to develop and hone their proposal development and marketing skills.

0101	Donald Milton Tu 1:30pm - 3:30pm Class time/details on ELMs	Seats (Total: 15) ONLINE ONLINE

MIEH786 **Capstone Project in Public Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of SPHL-Maryland Institute for Applied Environmental Health.

Capstone experience provding opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

0201	Paul Turner Contact instructor or department for details.	Seats (Total: 5)
0202	Amir Sapkota Contact instructor or department for details.	Seats (Total: 5)
0203	Amy Sapkota Contact instructor or department for details.	Seats (Total: 5)
0204	Donald Milton Contact instructor or department for details.	Seats (Total: 5)
0205	Robin Puett Contact instructor or department for details.	Seats (Total: 5)
0206	Sacoby Wilson Contact instructor or department for details.	Seats (Total: 5)
0207	Rachel Goldstein Contact instructor or department for details.	Seats (Total: 5)
0208	Devon Payne-Sturges Contact instructor or department for details.	Seats (Total: 5)

0209	Stephen Roth	Seats (Total: 5)
	Contact instructor or department for details.	

MIEH788 **Critical Readings in Environmental Health**

Credits: 1-3 Grading Method: Regular, Audit

In-depth examination and critical discussion of the current literature relevant to environmental health.

Contact department for information to register for this course.

MIEH789 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Individual reading and/or research under a specific faculty member in the department.

Contact department for information to register for this course.

MIEH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MIEH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

MIEH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 1-8 Grading Method: Sat-Fail

Contact department for information to register for this course.

MITH Maryland Institute for Technology in the Humanities — Fall 2020

MITH301 **Digital Publishing with Minimal Computing: Humanities at a Global Scale**

Credits: 3 Grading Method: Regular

In this Global Classrooms course, students of the University of Maryland and Universidad del Salvador, Buenos Aires, will come together to learn how to create and assess websites from a critical and humanities-focused perspective. Specifically, the course will introduce "minimal computing" approaches, which privilege the use of open technologies, ownership of data and code, reduction in computing infrastructure and, consequently, environmental impact. The course is structured around a group project with students from both universities. You will collaborate virtually to create a multilingual (Spanish and English) digital edition of a colonial era text, while learning about Digital Humanities approaches to literary studies, digital publishing, history, and postcolonial studies. Knowledge of the Spanish language is not required as teaching and collaboration will be conducted in English. In the spirit of fostering a multilingual approach, however, we will not discourage the use of Spanish among students and instructors; mutual respect and cooperation are paramount to the success of your course project.

Cross-listed with CMLT398M, ENGL378M, and LASC348C. Credit granted for MITH301, CMLT398M, ENGL378M, or LASC348C.

0101	Raffaele Viglianti	Seats (Total: 15)
	W 12:00pm - 1:50pm	ONLINE
	F 12:00pm - 12:50pm	ONLINE

MITH388T **Digital Humanities Research Assistantship; Maryland Institute for Technology in the Humanities Internships**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

An applied introduction to the theory and practice of digital research. The internship includes regular meetings with MITH staff, including designers, developers, information professionals, project managers, and faculty, to gain knowledge of existing digital scholarship and resources within the arts and humanities. Students may contribute to existing MITH projects or propose a small, independent research project on which they will receive support from MITH staff.

0101	Purdom Lindblad	Seats (Total: 5)
	Contact instructor or department for details.	

MITH729 **Colloquium in Digital Studies**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Colloquium in support of the ARHU-MITH Graduate Certificate in Digital Studies. We will meet periodically (approximately 4-5 times a semester) to read and discuss current work in the field, interact with visiting speakers, share work in progress, learn new tools and methods, and hear research presentations from one another.

Class meets in TWS 3136 on the following dates: 9/8, 10/6, 11/3, 12/8.

0101	Matthew Kirschenbaum F 3:00pm - 5:00pm	Seats (Total: 20) ONLINE	

MITH735 **Anatomy of Digital Humanities Research**

Credits: 3 Grading Method: Regular, Audit

Positioned as a companion to a disciplinary research methods course, this course emphasizes best practices and critical approaches in the context of the lifecycle of a collaborative research project from ideation to publication to preservation. This course explores common digital methodologies as it teaches collaboration and fast prototyping to help students develop a reflexive critical approach to digital research projects. Upon completing the course, students will have a research plan, including the beginnings of a literature review, wireframes, and proposal for the lifecycle of the research project.

0101	Purdom Lindblad Class time/details on ELMs	Seats (Total: 20) ONLINE	

MLAW MPower Undergraduate Law Programs Fall 2020

MLAW100 **Justice and the Law**

Credits: 3 Grading Method: Regular General Education: DSHS

Restriction: Course enrollment is restricted to students in the College Park Scholars Justice and Legal Thought Program (CPJT).

An exploration into the relationship between justice and law, including psychological, philosophical, political and legal approaches to justice, as well as an analytical framework for understanding human rights.

Restricted to College Park Scholars students in the Justice & Legal Thought Program.

0101	Robert Koulish TuTh 11:00am - 11:50am F 9:00am - 9:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0102	Robert Koulish TuTh 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0103	Robert Koulish TuTh 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 27) ONLINE ONLINE	 Discussion

MLAW304 **Introduction to Law and Social Inquiry**

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must be in the Law and Society (MLAW) minor.

An exploration of the relationship between law and society from an interdisciplinary perspective. Major themes cover the impact of law on society, society on law and social change.

0101	Martin Kobren	Seats (Total: 79)
	TuTh 9:30am - 10:45am	ONLINE

MLAW305 **Law and Legal Institutions in Social Context**

Credits: 3 Grading Method: Regular

Prerequisite: MLAW304. Restriction: Must be a student in the Law and Society Minor.

An exploration of case law, statutes, and regulations separately and together in their social context.

0101	Christine White	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ONLINE

MLAW358B **Selected Topics in Law and Society; Dealing with Social Injustice: The impact of Lead Exposure on Kids, Families, and Communities**

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

In thousands of communities across the United States, children are exposed to toxic substances such as lead. Places like Flint, Newark and Baltimore have become infamous in recent years because so many "lead kids" live in each community - a reflection of the impact of lead in the municipal water supply, of leaded paint in older homes, and of contaminated soil left by toxic industries and leaded gasoline. No level of lead exposure is safe: even at extremely low levels, lead can cause a brain injury that affects a child cognitively, behaviorally and physically. In this course, we will examine the many ways that social conditions leave children vulnerable to lead exposure and also deprive children, their families and their communities of access to just responses.

0101	Karen Czapanskiy	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

MLAW358C **Selected Topics in Law and Society; The Supreme Court and the Constitution**

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Jointly offered with GVPT439C. Credit only granted for MLAW358C or GVPT4 39C.

0101	Michael Spivey	Seats (Total: 5)
	MW 3:00pm - 4:15pm	ONLINE

MLAW358F **Selected Topics in Law and Society; First Amendment: Free Speech, Religion, and the Constitution**

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Jointly offered with GVPT439B. Credit only granted for MLAW358F or GVPT439B.

0101	Michael Spivey	Seats (Total: 20)
	MW 11:00am - 12:15pm	ONLINE

MLAW358O **Selected Topics in Law and Society; Special Topics in Global Environmental Law**

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

This course explores how legal systems throughout the world are responding to environmental problems, including climate change, air pollution, water supply, and waste disposal, and the legal and political factors that shape regulatory policies. It examines the roles played by government agencies, the judiciary, and citizen groups in the development, implementation and enforcement of environmental law.

0101	Robert Percival	Seats (Total: 20)
	MW 2:00pm - 3:15pm	ONLINE

MLAW358T **Selected Topics in Law and Society; Tackling Trafficking: The Legal System's Responses to Human Trafficking**

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

0101	Christine White TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE

MLAW358X **Selected Topics in Law and Society; Introduction to Constitutional Law**

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Jointly offered with GVPT431. Credit only granted for GVPT431 or MLAW358 X.

0101	Michael Spivey MW 1:00pm - 2:15pm	Seats (Total: 5) ONLINE

MLAW388 **Law and Society Internship**

Credits: 1-4 Grading Method: Regular

Participation in the Law and Society Internship (LASI) offers students the opportunity to enhance their education through practical skill building in the realm of law-related professionals.

Restricted to students within the Law and Society minor.

0101	Brandee Pettus Class time/details on ELMs	Seats (Total: 40) ONLINE
0201	Brandee Pettus Class time/details on ELMs	Seats (Total: 6) ONLINE

MLAW404 **Law & Society Capstone: Implications of Technology on Law & Society**

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Student must be enrolled in the Law and Society minor.

An exploration of the implications of technology on law and society from a variety of perspectives.Significant issues will be taken from contemporary scholarship and court cases.

0101	Brandee Pettus, Christine White Class time/details on ELMs	Seats (Total: 5) ONLINE

MLSC308 **PULSAR Language Science Research Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Research seminar for students in the PULSAR language science program. Weekly presentations and discussions on diverse topics in language science research, as well as on developing research skills.

0101	Tess Wood	Seats (Total: 25)
	Contact instructor or department for details.	

MOCB Molecular and Cell Biology Fall 2020

MOCB608 **Molecular and Cell Biology Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar in molecular and cell biology.

0101	Jonathan Dinman	Seats (Total: 12)
	Contact instructor or department for details.	

MOCB699 **Laboratory Rotation**

(Perm req)

Credits: 2-3 Grading Method: Sat-Fail

Laboratory experience in molecular-cell biology.

Contact department for information to register for this course.

MOCB898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

MOCB899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MSML Machine Learning Fall 2020

MSML601 **Probability and Statistics**

Credits: 3 Grading Method: Regular

Prerequisite: Undergraduate courses in calculus and basic linear algebra. Cross-listed with: DATA601. Credit only granted for: DATA601 or MSML601.

Provides a solid understanding of the fundamental concepts of probability theory and statistics. The course covers the basic probabilistic concepts such as probability space, random variables and vectors, expectation, covariance, correlation, probability distribution functions, etc. Important classes of discrete and continuous random variables, their inter-relation, and relevance to applications are discussed. Conditional probabilities, the Bayes formula, and properties of jointly distributed random variables are covered. Limit theorems, which investigate the behavior of a sum of a large number of random variables, are discussed. The main concepts random processes are then introduced. The latter part of the course concerns the basic problems of mathematical statistics, in particular, point and interval estimation and hypothesis testing.

PWS1	Leonid Koralov	Seats (Total: 50)	
	Meets August 31, 2020 - November 20, 2020		
	M 6:00pm - 9:30pm	ONLINE	
	Must be in Machine Learning Program. For permission to enroll, contact oes@umd.edu.		

MSML602 Principles of Data Science

Credits: 3 Grading Method: Regular

Restriction: Must be in the Data Science Post-Baccalaureate Certificate of Professional Studies or Master of Professional Studies in Data Science and Analytics program. Credit only granted for: CMSC641, DATA602, or MSML602.

An introduction to the data science pipeline, i.e., the end-to-end process of going from unstructured, messy data to knowledge and actionable insights. Provides a broad overview of what data science means and systems and tools commonly used for data science and illustrates the principles of data science through several case studies.

PCS1	Prem Saggar	Seats (Total: 20)	
	Meets August 31, 2020 - November 20, 2020		
	W 6:00pm - 9:30pm Class time/details on ELMs	IRB 0324 ONLINE	 Discussion
	Must be in Machine Learning Program. For permission to enroll, contact oes@umd.edu.		
PWS1	Prem Saggar	Seats (Total: 50)	
	Meets August 31, 2020 - November 20, 2020		
	W 6:00pm - 9:30pm	ONLINE	
	Must be in Machine Learning Program. For permission to enroll, contact oes@umd.edu.		

MSML612 **Deep Learning**

Credits: 3 Grading Method: Regular

Prerequisite: DATA603 or MSML603. Cross-listed with: DATA612. Credit only granted for: DATA612 or MSML612.

This course provides an introduction to the construction and use of deep neural networks, that is models that are composed of several layers of nonlinear processing. The class will especially focus on the foundational understanding of the main features in the structure of deep neural nets that make them attractive from the computational point of view and for a sample of applications. Specific topics include the key concept of backpropagation and its importance to reduce the computational cost of the training of the neural nets, a discussion of some of the various coding tools available and how they use parallelization, and a presentation and study of convolutional neural networks. Additional topics may include autoencoders, variational autoencoders, convolutional neural networks, recurrent and recursive neural networks, generative adversarial networks, and attention-based models. The concepts introduced in the class will finally be illustrated by some examples of applications chosen among various classification/clustering questions, computer vision, natural language processing.

PWS1	Zhizhong Han	Seats (Total: 25)
	Meets August 31, 2020 - November 20, 2020	
	Tu 6:00pm - 9:30pm	ONLINE
	Must be in Machine Learning Program. For permission to enroll, contact oes@umd.edu.	

MUED Music Education Fall 2020

MUED155 **Fundamentals for the Classroom Teacher**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in one of the following programs (Early Childhood Education; Elementary Education) ; or must be a Pre-Elementary Education major; or must be a Pre-Early Childhood Education major.

The fundamentals of music theory and practice, related to the needs of the classroom and the kindergarten teacher.

0101	Bri'Ann Wright	Seats (Total: 25)
	MW 4:15pm - 5:30pm	ONLINE

MUED186 **Pre-professional Experiences I**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Music Education program. Additional information: Fulfills the College of Arts and Humanities requirement for ARHU158.

An orientation into the role of the music teacher in the school and community. On-site school visits at elementary, middle and high school levels form the basis for discussion and exploration of all facets of the music education profession.

0101	Mike Hewitt	Seats (Total: 30)	
	M 10:00am - 10:50am	PAC 2168	
	F 9:00am - 10:50am	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab

MUED213 **String Technique and Pedagogy I**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Music Education program.

A study of violin, viola, cello and bass technique and pedagogy; beginning level. Emphasizes group process playing and teaching.

0101	Philip Hale	Seats (Total: 25)
	M 6:15pm - 8:30pm	ONLINE

MUED320 **Teaching Secondary Instrumental Music I**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUED187. Restriction: Must be in Music Education program.

Prepare instrumental-emphasis music education majors to synthesize the knowledge and skills that will enable them to extend secondary-level musical skill through planned instruction and development of teaching materials.

0101	Stephanie Prichard	Seats (Total: 12)
	TuTh 2:00pm - 3:15pm	ONLINE

MUED333 **Classroom Vocal Pedagogy**

Credits: 2 Grading Method: Regular

Prerequisite: MUED187 and MUED186. Restriction: Must be in Music Education program.

An introduction to the fundamentals of group vocal pedagogy for the choral and general classroom teacher, including the teaching of posture, breathing, resonance, registration, articulation and foreign language diction as appropriate to needs of the child or adolescent singer in K-12 classroom settings.

0101	Kenneth Elpus	Seats (Total: 10)	
	W 4:00pm - 6:30pm	ONLINE	

MUED420 **Teaching Secondary Instrumental Music II**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail General Education: DSSP

Prerequisite: MUED320 and MUED311. Restriction: Must be in Music Education program.

Prepare instrumental-emphasis music education majors to synthesize the knowledge and skills that will enable them to develop and/or maintain an exemplary, curricular-oriented, research-based, comprehensive secondary instrumental program.

0101	Mike Hewitt	Seats (Total: 20)	
	Tu 9:00am - 11:00am	PAC 2540	
	Contact instructor or department for details.	Location: TBA	Lab
	Th 8:00am - 12:00pm	ONLINE	Lab
	Class time/details on ELMs		

MUED471 **Teaching General Music**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: MUED222 and MUED333. Restriction: Must be in Music Education program.

An examination of children's musical development via model teaching experiences. Students in this course will be involved in learning appropriate techniques and materials used to plan, deliver, and assess musical instruction effectively in general music settings for K-12 students. The focus is on how to implement a sequential, balanced, and comprehensive music curriculum (i.e., artistic processes: creating, performing, and responding) that emphasizes opportunities for students to construct their own learning.

0101	Robin Giebelhausen	Seats (Total: 15)	
	Tu 9:00am - 11:00am	ONLINE	
	Class time/details on ELMs	ONLINE	
	Th 8:00am - 12:00pm	ONLINE	Lab

MUED474 **Field Experiences: Pre-Student Teaching**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: MUED420 and MUED411; or (MUED472 and MUED471). Restriction: Permission of ARHU-School of Music department; and senior standing.

Field experiences to fulfill teaching requirements in K-12 music teacher education program.

0101	Mike Hewitt	Seats (Total: 15)	
	Class time/details on ELMs	ONLINE	

MUED484 **Student Teaching in Elementary School: Music**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Corequisite: MUED494. Restriction: Permission of ARHU-School of Music department; and must be in Music Education program.

Fulfills elementary teaching requirements in K-12 music teacher education program. Limited to music education majors who have previously applied.

0101	Robin Giebelhausen	Seats (Total: 15)	
	Class time/details on ELMs	ONLINE	Lab

MUED494 **Student Teaching in Secondary School: Music**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Corequisite: MUED484. Restriction: Permission of ARHU-School of Music department; and must be in Music Education program.

Fulfill secondary teaching requirements in K-12 music teacher education program. Limited to music education majors who have previously applied.

Students must pay a $750.00 student teaching fee.

0101	Stephanie Prichard	Seats (Total: 15)	
	Class time/details on ELMs	ONLINE	Lab

MUED499M **Workshops, Clinics, Institutes; Marching Band Techniques**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Innovative and experimental dimensions of music education offered to meet the needs of music teachers and music supervisors allowing students to individualize their programs.

0101	Andrea Brown, Craig Potter	Seats (Total: 15)	
	W 1:00pm - 1:50pm	PAC 2540	Lab
	F 1:00pm - 1:50pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab

MUED697 **Curriculum & Assessment in Music Education**

(Perm req)

Credits: 3 Grading Method: Regular

Theoretical and practical knowledge related to curriculum,assessment, and evaluation in music education. Course topics include: a) aspects of philosophy,sequencing, and design in music curricula; b) reliability, validity, and fairness in assessment; c) planning for and designing assessment of student knowledge and skills; d) policy, procedures, and outcomes associated with music teacher evaluation.

0101	Stephanie Prichard	Seats (Total: 15)
	Tu 5:00pm - 7:30pm	ONLINE

MUED698V **Current Trends in Music Education; Vocal Pedagogy for the Choral Conductor**

(Perm req)

Credits: 3 Grading Method: Regular

A survey of current and emerging philosophies, methodologies and curricula in music education and their implementation. The influence of educational and social changes and the expanding musical scene upon the music programs for children of all ages and for teacher education.

0101	Kenneth Elpus	Seats (Total: 5)
	W 4:00pm - 6:30pm	ONLINE

MUED729 **Doctoral Colloquium in Music Education**

(Perm req)

Credits: 1 Grading Method: Sat-Fail, Audit

For students in PhD Progam in Music Education. Meets approximately 4-5 times per semester to read and discuss current work in the field, interact with visiting speakers, share work in progress, learn new tools and methods, and hear research presentations from one another

0101	Stephanie Prichard	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

MUED790 **Design and Analysis of Research in Music Education**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed a college-level statistics course. And MUED690; or an equivalent master's level research in music education course.

Advanced applications of quantitative and qualitative social science research paradigms to research problems in the field of music education. Topics include the formation of researchable questions; the design of experimental, quasi-experimental, descriptive, and qualitative research studies; and the analysis and interpretation of research data.

0101	Kenneth Elpus	Seats (Total: 12)
	Class time/details on ELMs	ONLINE

MUSC School of Music Fall 2020

MUSC001 **MUSP Course Evaluation**

(Perm req)

Credits: 0 Grading Method:

Contact department for information to register for this course.

MUSC099 **Performance Attendance**

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Performance attendance laboratory for undergraduate music majors.

0101	Gilberto Cruz	Seats (Total: 200)
	Contact instructor or department for details.	

MUSC102 **Class Piano**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Functional piano training for beginners. Development of techniques for school and community playing. Basic piano techniques; chord, arpeggio and scale techniques; melody and song playing; simple accompaniments, improvisation for accompaniments and rhythms; sight reading and transposition and playing by ear.

For MUSC majors only.

0101	Aleksandra Velgosha	Seats (Total: 14)
	TuTh 2:00pm - 3:15pm	ONLINE
0201	Natnaree Suwanpotipra	Seats (Total: 14)
	MWF 11:00am - 11:50am	ONLINE

0301	Aleksandra Velgosha TuTh 3:15pm - 4:30pm	Seats (Total: 12) ONLINE

MUSC102B **Class Piano**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Functional piano training for beginners. Development of techniques for school and community playing. Basic piano techniques; chord, arpeggio and scale techniques; melody and song playing; simple accompaniments, improvisation for accompaniments and rhythms; sight reading and transposition and playing by ear.

0101	Yuhe Wang TuTh 11:00am - 12:15pm	Seats (Total: 14) ONLINE

MUSC106 **Beginning Classical Guitar**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Introduction to classical guitar notation, technique, literature and performance. No previous musical experience required.

For students with no previous musical experience.

0101	Gerard Kunkel MW 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 12) PAC 1230 ONLINE

MUSC123 **Movement for Singers**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department.

Systematic exercises, improvisations and dances in conjunction with artistic vocal expression. Performance and critique of stage deportment, gestures and recital techniques.

0101	Carmen Balthrop Tu 6:15pm - 7:45pm Class time/details on ELMs	Seats (Total: 15) TWS 0320 ONLINE

MUSC127 **Vocal Diction: Italian**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department. Restriction: Must be in a major within the ARHU-School of Music department.

Augmentation of private voice study. Phonetics and diction for singers of Italian vocal literature.

0101	Diba Alvi	Seats (Total: 15)	
	TuTh 2:00pm - 2:50pm	ONLINE	

MUSC128 **Sight Reading For Pianists**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

A course to give the piano major an opportunity to develop proficiency in sight reading at the keyboard.

0101	Natnaree Suwanpotipra	Seats (Total: 5)	
	MW 10:00am - 10:50am	PAC 1123	
	Class time/details on ELMs	ONLINE	

MUSC129A **Ensemble; Chamber Music - Strings**

(Perm req)

Credits: 1

Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

For MUSC majors only.

0101	David Salness	Seats (Total: 45)	
	TuTh 11:00am - 12:15pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab
1001	Sally McLain	Seats (Total: 10)	
	TuTh 11:00am - 12:15pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
1101	Titilayo Ayangade	Seats (Total: 10)	
	TuTh 11:00am - 12:15pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC129B **Ensemble; Chamber Woodwinds**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

For MUSC majors only.

0101	Mark Hill	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC129C **Ensemble; Chamber Music - Brasses**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

For MUSC majors only.

0101	Paul Gekker, Justin Drew	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab
0701	Instructor: TBA	Seats (Total: 5)	
	TuTh 11:00am - 12:15pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC129G **Ensemble; Balinese Gamelan**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	I Suadin	Seats (Total: 20)	
	Th 7:00pm - 8:30pm	PAC 1230	Lab

MUSC129K **Ensemble; Japanese Koto**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Kyoko Okamoto	Seats (Total: 7)	
	Tu 5:30pm - 7:00pm	PAC 3160	Lab
0201	Kyoko Okamoto	Seats (Total: 7)	
	Tu 7:00pm - 8:30pm	PAC 3160	Lab

MUSC129P **Ensemble; Percussion**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Lee Hinkle	Seats (Total: 15)	
	M 5:00pm - 7:30pm	PAC 2540	Lab
	W 5:15pm - 7:15pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC129Q **Ensemble; Korean Percussion Ensemble**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Sebastian Wang	Seats (Total: 8)	
	Th 7:00pm - 8:30pm	PAC 2170	

MUSC129U **Ensemble; Tuba & Euphonium**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Craig Potter W 6:00pm - 6:50pm	Seats (Total: 20) Location: TBA	Lab

MUSC140 **Music Fundamentals I**

Credits: 3 | Grading Method: Regular, Audit | CORE: HA | General Education: DSSP

Restriction: Must not be in any of the following programs (Music (Professional Program); Music Education).

Introductory theory course. Notation, scales, intervals, triads, rhythm, form and basic aural skills.

0101	Rizgar Ismael MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 12) ONLINE ONLINE	Discussion
0102	Rizgar Ismael MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 13) ONLINE ONLINE	Discussion
0201	Rizgar Ismael MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 12) ONLINE ONLINE	Discussion
0202	Rizgar Ismael MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 13) ONLINE ONLINE	Discussion
FC01	Michael Oberhauser Tu 3:00pm - 4:15pm Th 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 13) ONLINE ONLINE	Lab

MUSC150 **Theory of Music I**

(Perm req)

Credits: 3 | Grading Method: Regular, Audit

Prerequisite: Departmental audition and entrance examination. Restriction: Must be in one of the following programs (Music (Liberal Arts Program); Music (Jazz Performance Option); Music (Winds & Percussions Performance Option); Music (Voice Performance Option); Music Composition; Music (Professional Program); Music (Piano Performance Option); Music Performance-Winds and Percussion; Music Theory and Composition; Music Performance-Piano; Music Performance-Jazz Studies; Music Performance-Voice; Music Performance-Strings; Music (Strings Performance Option)).

A study of basic concepts and skills in tonal melody and harmony through analysis and composition.

0101	Richard Layton MWF 8:00am - 8:50am TuTh 8:25am - 9:15am	Seats (Total: 8) ONLINE ONLINE	 Lab
0102	Richard Layton MWF 8:00am - 8:50am TuTh 9:30am - 10:20am	Seats (Total: 8) ONLINE ONLINE	 Lab
0201	Richard Layton MWF 9:00am - 9:50am TuTh 8:25am - 9:15am	Seats (Total: 8) ONLINE ONLINE	 Lab
0202	Richard Layton MWF 9:00am - 9:50am TuTh 9:30am - 10:20am	Seats (Total: 8) ONLINE ONLINE	 Lab
0301	Gretchen Horlacher MWF 10:00am - 10:50am TuTh 8:25am - 9:15am	Seats (Total: 8) ONLINE ONLINE	 Lab
0302	Gretchen Horlacher MWF 10:00am - 10:50am TuTh 9:30am - 10:20am	Seats (Total: 8) ONLINE ONLINE	 Lab

MUSC202 **Intermediate Class Piano I**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: MUSC103; or must have equivalent piano training.

Advanced keyboard techniques. Continuation of skills introduced in MUSC103. Transposition, modulation and sight reading; methods of teaching functional piano.

Only for voice and instrumental principals with limited piano experience.

0101	Yuhe Wang MWF 9:00am - 9:50am	Seats (Total: 15) ONLINE	

MUSC204 **Popular Music in Black America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Traces black popular music in the U.S. with a special focus on spirituals, ragtime, the blues, early jazz, R&B, Motown, funk, soul, and rap. Examines how these styles have been borrowed by the American music industry.

0101	Nicole Powlison Class time/details on ELMs Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Nicole Powlison Class time/details on ELMs Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Nicole Powlison Class time/details on ELMs Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Nicole Powlison Class time/details on ELMs Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion
0105	Nicole Powlison Class time/details on ELMs Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	Nicole Powlison Class time/details on ELMs Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion
0107	Nicole Powlison Class time/details on ELMs Class time/details on ELMs	Seats (Total: 20) ONLINE ONLINE	 Discussion

0108	Nicole Powlison	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0109	Nicole Powlison	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

MUSC205 **History of Popular Music, 1950-Present**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU, DVUP

A historical survey of rock music (blues, rock, soul, metal, rap, etc.) from circa 1950 to the present, with emphasis on popular music as music and popular music as social history.

0101	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0102	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0103	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0104	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0105	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0106	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

0107	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0108	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0109	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0110	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0111	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0112	Patrick Warfield	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
FC01	Patrick Warfield	Seats (Total: 40)	
	Class time/details on ELMs	ONLINE	
	Restricted to students in Freshmen Connection.		

MUSC210 **The Impact of Music on Life**

Credits: 3 Grading Method: Regular CORE: HA, D General Education: DSHU, DVUP

Credit only granted for: MUET210 or MUSC210. Formerly: MUET210.

Music as a part of culture. Materials drawn from traditions throughout the globe to illustrate issues of historical and contemporary significance, including the impact of race, class and gender on the study of music.

0101	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

0102	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0103	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0104	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0105	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0106	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0107	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0108	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0109	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0110	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0111	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

0112	Fernando Rios	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

MUSC215 **World Popular Musics and Identity**

Credits: 3	Grading Method: Regular, Audit	CORE: HA, D	General Education: DSHU, DVUP

Credit only granted for: MUET200 or MUSC215. Formerly: MUET200.

Focus on popular musics in different cultures with an emphasis on cross-cultural comparisons and analysis of how musics and identity intersect.

0101	Laura Schnitker	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0102	Laura Schnitker	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0103	Laura Schnitker	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0104	Laura Schnitker	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0105	Laura Schnitker	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0106	Laura Schnitker	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0107	Laura Schnitker	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

0108	Laura Schnitker	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0109	Laura Schnitker	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

MUSC227 **Vocal Diction: German**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: Permission of ARHU-School of Music department. Restriction: Must be in a major within ARHU-School of Music department.

Augmentation of private study. Phonetics and diction for singers of German vocal literature.

0101	Diba Alvi	Seats (Total: 15)
	TuTh 11:00am - 11:50am	ONLINE

MUSC228 **Introduction to Accompanying for Pianists**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

A course to introduce the piano major to accompanying at an intermediate level of difficulty. Class instruction will center on rehearsal and coaching geared toward performance, and will be supplemented by experience working as an accompanist in voice classes or applied studios.

0101	Michael Baitzer	Seats (Total: 10)
	Tu 4:00pm - 6:00pm	PAC 2126
	Class time/details on ELMs	ONLINE

MUSC229A **Ensemble; Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	David Neely	Seats (Total: 70)		
	TuTh 3:30pm - 6:30pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC229D **Ensemble; Wind Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition, contact instructor to make arrangements.

0101	Andrea Brown	Seats (Total: 75)		
	TuTh 3:30pm - 6:30pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC229E **Ensemble; Wind Ensemble**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition, contact instructor to make arrangements.

0101	Andrea Brown	Seats (Total: 75)		
	MWF 11:00am - 12:30pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC229F **Ensemble; Marching Band**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition.

0101	Craig Potter, Andrea Brown	Seats (Total: 300)		
	MWF 3:00pm - 5:00pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

FC01	Craig Potter	Seats (Total: 10)	
	MWF 3:00pm - 5:00pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		

MUSC229G **Ensemble; Marching Band Repertoire**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Corequisite: MUSC 229F.

0101	Craig Potter, Andrea Brown	Seats (Total: 300)	
	Tu 7:00pm - 9:00pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab
FC01	Craig Potter	Seats (Total: 10)	
	Tu 7:00pm - 9:00pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		

MUSC229I **Ensemble; Marching Band Auxiliary**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Corequisite: MUSC 229F.

0101	Craig Potter, Andrea Brown	Seats (Total: 75)	
	TuTh 7:00pm - 9:00pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC229J **Ensemble; Jazz Ensemble**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Tim Powell	Seats (Total: 25)	
	MW 5:30pm - 7:15pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab
0201	Tim Powell	Seats (Total: 30)	
	MW 1:00pm - 2:20pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab
0301	Tim Powell	Seats (Total: 30)	
	M 7:30pm - 9:30pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab
FC01	Tim Powell	Seats (Total: 3)	
	M 7:30pm - 9:30pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		

MUSC229K **Ensemble; Marching Band Dance Team**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Ann Kennedy	Seats (Total: 30)	
	Su 7:00pm - 9:30pm	Location: TBA	Lab
	TuTh 6:30pm - 9:00pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
FC01	Ann Kennedy	Seats (Total: 10)	
	Su 7:00pm - 9:30pm	Location: TBA	Lab
	TuTh 6:30pm - 9:00pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		

MUSC229P **Ensemble; Pep Band**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Permission of Instructor.

0101	Andrea Brown	Seats (Total: 60)	
	Contact instructor or department for details.		

MUSC229R **Ensemble; Repertoire Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Jesse Leong	Seats (Total: 50)	
	MW 3:00pm - 5:00pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC229U **Ensemble; University Band**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition, contact instructor to make arrangements.

0101	Craig Potter	Seats (Total: 100)	
	W 7:30pm - 9:30pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC229Z **Ensemble; Jazz Combo**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Gerard Kunkel Contact instructor or department for details.	Seats (Total: 10)	
0201	Thomas Baldwin Contact instructor or department for details.	Seats (Total: 10)	
0301	Tim Powell, Aleksey Izotov Contact instructor or department for details.	Seats (Total: 10)	
0401	Tim Powell, William Dunn Contact instructor or department for details.	Seats (Total: 10)	

MUSC250 **Advanced Theory of Music I**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in MUSC151.

A continuation of MUSC 151, with further study of chromatic and modulatory techniques of the nineteenth century. Emphasis on sight singing, ear training, analysis and compositional skills.

0101	Jared Kenlon TuTh 8:00am - 9:15am MW 8:00am - 8:50am	Seats (Total: 6) ONLINE ONLINE	 Lab
0102	Jared Kenlon TuTh 8:00am - 9:15am MW 9:00am - 9:50am	Seats (Total: 6) ONLINE ONLINE	 Lab
0201	Dora Hanninen TuTh 9:30am - 10:45am MW 9:00am - 9:50am	Seats (Total: 6) ONLINE ONLINE	 Lab
0202	Dora Hanninen TuTh 9:30am - 10:45am MW 9:00am - 9:50am	Seats (Total: 6) ONLINE ONLINE	 Lab

0301	Mark Wilson TuTh 9:30am - 10:45am MW 10:00am - 10:50am	Seats (Total: 6) ONLINE ONLINE	 Lab
0302	Mark Wilson TuTh 9:30am - 10:45am MW 10:00am - 10:50am	Seats (Total: 6) ONLINE ONLINE	 Lab

MUSC260 **Music as Global Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Prerequisite: MUSC151. Restriction: Must be in a major within the ARHU-School of Music department. Credit only granted for: MUSC220 or MUSC260.

Explores how and why people create, transform, and move music around the globe. Taking a comparative approach to Western art musics and other musics of the world, course will examine a variety of musical practices in their social, political, and economic contexts. Experiential knowledge will be developed through hands-on ethnographic research.

0101	John Witzleben MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	John Witzleben MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	John Witzleben MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

MUSC269R **Special Topics in Study Abroad II; From Elvis to Rap: 50 Years of History As Seen Through Rock Music**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

MUSC289I **Exploring the Power of Musical Performance in Social Engagement**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA, D | General Education: DSHU, DVUP, SCIS

Explores the ways people, across cultures and times, have drawn on music's power to further causes such as revolution and social change or to bring attention to injustices such as discrimination, exclusion, or oppressive working conditions.

0101	Lee Hinkle	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	ONLINE	
	F 9:00am - 9:50am	ONLINE	Discussion
0102	Lee Hinkle	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion
0103	Lee Hinkle	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	ONLINE	
	F 11:00am - 11:50am	ONLINE	Discussion

MUSC328 **Introduction to Chamber Music for Pianists**

(Perm req)

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit

A course to introduce the piano major to chamber music at a moderately difficult level. Class instruction will center on actual rehearsal and coaching geared toward performance, and will be supplemented by further experience in applied instrumental studios.

0101	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC329A **Ensemble; University of Maryland Chorale**

(Perm req)

Credits: 1 | Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements. Monthly evening rehearsals will be scheduled as announced.

0101	Matthew Goinz, Amy Broadbent	Seats (Total: 75)	
	TuTh 4:30pm - 6:00pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC329B **Ensemble; Chamber Singers**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements. Monthly evening rehearsals will be scheduled as announced.

0101	Edward Maclary	Seats (Total: 50)	
	MW 3:00pm - 3:50pm	PAC 2201	Lab
	TuTh 3:30pm - 4:20pm	PAC 2201	Lab

MUSC329E **Ensemble; Gospel Choir**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Anne Carswell	Seats (Total: 60)	
	Th 7:00pm - 10:00pm	PAC 2201	Lab

MUSC329M **Ensemble; Men's Chorus**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Monthly evening rehearsals will be scheduled as announced.

0101	Matthew Goinz	Seats (Total: 40)	
	MWF 12:00pm - 12:50pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab
	Sharing with Craig Arnold's approval even though there are two different instructors.		

FC01	Matthew Goinz	Seats (Total: 10)	
	MWF 12:00pm - 12:50pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		

MUSC329O **Ensemble; Opera Chorus**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Edward Maclary	Seats (Total: 30)	
	F 3:30pm - 5:30pm	PAC 2170	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC329W **Ensemble; Treble Choir**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Monthly evening rehearsals will be scheduled as announced.

0101	Kenneth Elpus	Seats (Total: 60)	
	MWF 12:00pm - 12:50pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab
FC01	Kenneth Elpus	Seats (Total: 10)	
	MWF 12:00pm - 12:50pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab
	Restricted to students in Freshmen Connection.		

MUSC361 **Music in Western Culture After 1900**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC360. Restriction: Must be in a major within the ARHU-School of Music department. Credit only granted for: MUSC330 or MUSC361.

Continuation of MUSC 360. A historical study of Western classical music, popular music, and jazz since 1900.

0101	Nicole Powlison	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	ONLINE	
	F 1:00pm - 1:50pm	ONLINE	Discussion
0102	Nicole Powlison	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	ONLINE	
	F 2:00pm - 2:50pm	ONLINE	Discussion
0103	Nicole Powlison	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	ONLINE	
	F 12:00pm - 12:50pm	ONLINE	Discussion

MUSC369M **Special Topics in Study Abroad III; Masterpieces of Italian Opera**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

MUSC379 **Opera Workshop**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail

Open to music and non-music majors (by audition). Operatic production and performance, performance techniques and coaching, stage direction, set design, costume design and make-up. Repertory will include smaller operatic works, excerpts or scenes.

0101	Amanda Consol	Seats (Total: 15)	
	MW 4:00pm - 6:00pm	PAC 2170	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC386 **Experiential Learning**

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-School of Music department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

MUSC388 **Music Internship**

(Perm req)

Credits: 3 Grading Method: Regular

Pre-professional field work in music.

Contact department for information to register for this course.

MUSC389 **Music Internship Analysis**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Documentation and evaluation of field work experience.

Contact department for information to register for this course.

MUSC400S **Music Pedagogy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSP315; and permission of ARHU-School of Music department.

Conference course. A study of major pedagogical treatises in music, and an evaluation of pedagogical techniques, materials, and procedures.

0101	Eric Kutz, Irina Muresanu	Seats (Total: 20)
	M 5:00pm - 7:30pm	ONLINE

MUSC428 **Repertoire Coaching of Vocal or Chamber Music**

(Perm req)

Credits: 2 Grading Method: Regular

A course for piano students who wish to go further than the work offered in MUSC128, MUSC228 and MUSC328 by becoming specialists in the areas of vocal coaching or chamber music coaching. Elements of pedagogy, conducting and responsible artistic decision-making for the entire musical production.

0101	Rita Sloan, Irina Muresanu	Seats (Total: 5)
	Contact instructor or department for details.	

MUSC443 **Solo Vocal Literature**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC330 and MUSC331; or students who have taken courses with comparable content may contact the department.

The study of solo vocal literature from the Baroque Cantata to the Art Song of the present. The Lied, Melodie, vocal chamber music and the orchestral song are examined.

0101	Diba Alvi	Seats (Total: 10)
	TuTh 9:30am - 10:45am	ONLINE

MUSC444 **Wind and Percussion Literature**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department. Corequisite: MUSP420 or MUSP419.

Recital program notes and written projects in wind or percussion literature.

Contact department for information to register for this course.

MUSC446 **String Literature**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSP316; and permission of ARHU-School of Music department.

Recital program notes and written projects in string literature.

Contact department for information to register for this course.

MUSC448 **Selected Topics in Music**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

MUSC448A **Selected Topics in Music; Accompanying Practicum**

(Perm req)

Credits: 1 Grading Method: Regular

0101	Mayron Tsong	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC448I **Selected Topics in Music; Music and Dance: An Introduction to Choreomusical Analysis**

Credits: 3 Grading Method: Regular, Audit

Cross-listed with MUSC699I. Credit granted for MUSC448I or MUSC699I.

0101	Gretchen Horlacher MW 2:00pm - 3:15pm	Seats (Total: 12) ONLINE

MUSC448M **Selected Topics in Music; History of Music Theory to 1700**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Barbara Haggh-Huglo Tu 7:00pm - 9:30pm	Seats (Total: 12) ONLINE

MUSC448T **Selected Topics in Music; Critical Concepts in Music Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Dora Hanninen TuTh 11:00am - 12:15pm	Seats (Total: 8) ONLINE

MUSC448W **Selected Topics in Music; Instrumental Pedagogy**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSC450 **Musical Form**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC251.

A study of the principles of organization in music with emphasis on eighteenth and nineteenth century European music. Reading and analysis of scores exemplifying the musical forms.

0101	Daniel Zimmerman TuTh 2:00pm - 3:15pm	Seats (Total: 25) ONLINE

MUSC453 **Jazz Improvisation I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC251; or students who have taken courses with comparable content may contact the department. And permission of ARHU-School of Music department. Credit only granted for: MUSC345 or MUSC453. Formerly: MUSC345.

Jazz theory, notational conventions, improvisation techniques, reading and analysis of music, and performance in small combo format.

0101	Tim Powell	Seats (Total: 8)	
	M 7:30pm - 9:30pm Class time/details on ELMs	PAC 1208 ONLINE	Lab

MUSC455 **Theory of Jazz**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC250; or permission of ARHU-School of Music department. Restriction: Must be in a major within ARHU-School of Music department.

Analysis of jazz harmony, with emphasis on principles of substitution, reharmonization, and syntax. Topics may also include chord/scale relationships, phrasing and articulation, notation, and introductory arranging concepts such as orchestration and form.

0101	Tim Powell	Seats (Total: 12)	
	TuTh 3:30pm - 4:45pm Class time/details on ELMs	PAC 3168 ONLINE	

MUSC460 **Tonal Counterpoint I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC251; or permission of ARHU-School of Music department.

A course in Eighteenth-Century contrapuntal techniques, analysis and original composition of two-voice dances, preludes, and inventions. Includes an introduction to the study of fugue and canon.

0101	David Froom	Seats (Total: 15)	
	MW 5:00pm - 6:15pm	ONLINE	

MUSC467 **Piano Pedagogy I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department.

A study of major pedagogical treatises in music, and an evaluation of pedagogical techniques, materials, and procedures.

0101	Bradford Gowen	Seats (Total: 5)
	MW 11:00am - 12:15pm	ONLINE

MUSC469C **Orchestral Excerpts for String Players; Violin**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

Restriction: permission of department.

0101	David Salness	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC469D **Orchestral Excerpts for String Players; Viola**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

Restriction: permission of department.

0101	Katherine Murdock	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC469F **Orchestral Excerpts for String Players; Bass**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Richard Barber	Seats (Total: 15)
	W 4:30pm - 5:45pm Class time/details on ELMs	Location: TBA ONLINE

MUSC469V **Orchestral Excerpts for String Players; Harp**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Sarah Fuller Contact instructor or department for details.	Seats (Total: 10)

MUSC490 **Conducting**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: MUSC251.

Vocal and instrumental baton techniques.

0101	Andrea Brown MWF 9:00am - 9:50am Class time/details on ELMs	Seats (Total: 13) PAC 2540 ONLINE
0201	Edward Maclary MWF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 13) PAC 2201 ONLINE

MUSC499 **Independent Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent research on a topic chosen in consultation with the instructor, which may culminate in a paper or appropriate project.

Contact department for information to register for this course.

MUSC550 **Theory of Music Graduate Review**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Music department.

Music theory review for graduate students:aural training, counterpoint, basic diatonic harmony, chromatic harmony, and analysis of complete works.

0101	Robert Gibson TuTh 2:00pm - 3:15pm	Seats (Total: 15) ONLINE

MUSC601 **Advanced English Lyric Diction**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)) . And permission of instructor; or admission to graduate voice program.

Concepts, strategies and techniques for singing operatic, oratorio and song literature in English: stress patterns, linkage, stressed and non stressed vowels, dipthongs, placement of consonants and vowels, and communication of text with emphasis on current performance practices. Use of the International Phonetic Alphabet (IPA) will be stressed.

0101	Jennifer Cabot	Seats (Total: 15)
	Tu 10:30am - 12:00pm	PAC 2170
	Class time/details on ELMs	ONLINE

MUSC604 **Advanced French Lyric Diction**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)) . And permission of instructor; or admission to graduate voice program.

Concepts, strategies and techniques for singing operatic and song literature in French: phoneticization, formation and singing of the vowel-sounds, semi-consonants, and consonants; the liaison; legato singing in French; the hiatus, mute and aspirate 'h'; stress and word rhythm. Use of the International Phonetic Alphabet (IPA) will be stressed.

0101	Gran Wilson	Seats (Total: 15)
	Tu 10:30am - 12:00pm	PAC 1218
	Class time/details on ELMs	ONLINE

MUSC605 **Opera Repertory I**

(Perm req)

Credits: 1

Grading Method: Regular

Prerequisite: MUSC602; or permission of instructor. Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)).

Advanced vocal coaching of selections from the Italian, French, German, and English opera repertory: musical accuracy; language facility; diction clarity; and dramatic interpretation.

0101	Craig Kier	Seats (Total: 10)
	Th 10:30am - 12:00pm	ONLINE

MUSC608 **Chamber Music Repertory; Chamber Music Repertoire**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Prerequisite: graduate standing as a major in performance. A study, through performance, of diversified chamber music for standard media.

Contact department for information to register for this course.

MUSC609 **Piano Chamber Music Practicum and Analysis**

(Perm req)

Credits: 2

Grading Method: Regular

Study of repertoire written for piano in duos or with several instruments, to develop an accompanists advanced performance skills in listening, balance, nuance in dynamics, harmonic motion and phrasing.

0101	Rita Sloan, Irina Muresanu	Seats (Total: 10)	
	Contact instructor or department for details.		

MUSC611 **Opera Techniques I**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Corequisite: MUSC601. Restriction: Permission of director of opera; and must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)).

Techniques for opera performance: Improvisation; Acting I, Scene Study I; and Movement I. Practical application of styles and techniques to operatic repertoire.

0101	Craig Kier	Seats (Total: 10)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab

MUSC613 **Opera Techniques III**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: Minimum grade of B- in MUSC612; and permission of Director of Opera required. Corequisite: MUSC603 and MUSC605. Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)).

Continuation of MUSC 612. Techniques for opera performance: Scene Study III; Movement III; and Shakespeare.

0101	Craig Kier	Seats (Total: 10)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab

MUSC629A **Ensemble; Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	David Neely	Seats (Total: 50)	
	TuTh 3:30pm - 6:30pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC629C **Ensemble; Wind Ensemble**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Michael Votta	Seats (Total: 20)	
	MWF 11:00am - 12:30pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC629F **Ensemble; Marching Band**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Andrea Brown	Seats (Total: 175)	
	MWF 3:00pm - 5:00pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC629G **Ensemble; Balinese Gamelan**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	I Suadin	Seats (Total: 5)	
	Th 7:00pm - 8:30pm	PAC 1230	Lab

MUSC629H **Ensemble; Harp**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Sarah Fuller	Seats (Total: 1)	
	TuTh 11:00am - 12:15pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC629J **Ensemble; Jazz Ensemble**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Tim Powell	Seats (Total: 20)	
	MW 5:30pm - 7:15pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab
0201	Tim Powell	Seats (Total: 10)	
	MW 1:00pm - 2:20pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab
0301	Tim Powell	Seats (Total: 10)	
	M 7:30pm - 9:30pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC629K **Ensemble; Japanese Koto**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Kyoko Okamoto	Seats (Total: 2)	
	Tu 5:30pm - 7:00pm	PAC 3160	Lab
0201	Kyoko Okamoto	Seats (Total: 2)	
	Tu 7:00pm - 8:30pm	PAC 3160	Lab

MUSC629O **Ensemble; Tuba & Euphonium**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Craig Potter	Seats (Total: 5)	
	W 6:00pm - 6:50pm	Location: TBA	Lab

MUSC629P **Ensemble; Percussion Ensemble**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Lee Hinkle	Seats (Total: 5)	
	M 5:00pm - 7:30pm	PAC 2540	Lab
	W 5:15pm - 7:15pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab
0201	Lee Hinkle	Seats (Total: 5)	
	Contact instructor or department for details.		

MUSC629Q **Ensemble; Korean Percussion Ensemble**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Sebastian Wang	Seats (Total: 2)	
	Th 7:00pm - 8:30pm	PAC 2170	

MUSC629R **Ensemble; Repertoire Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Jesse Leong	Seats (Total: 10)	
	MW 3:00pm - 5:00pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC629U **Ensemble; University Band**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Open by audition, contact instructor to make arrangements.

0101	Craig Potter	Seats (Total: 10)	
	W 7:30pm - 9:30pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC629W **Ensemble; Wind Orchestra**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Open by audition, contact instructor to make arrangements.

0101	Michael Votta	Seats (Total: 30)	
	TuTh 3:30pm - 6:30pm	PAC 2540	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC629Z **Ensemble; Jazz Combo**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Gerard Kunkel	Seats (Total: 10)
	Contact instructor or department for details.	
0201	Thomas Baldwin	Seats (Total: 10)
	Contact instructor or department for details.	
0301	Tim Powell, Aleksey Izotov	Seats (Total: 10)
	Contact instructor or department for details.	
0401	Tim Powell, William Dunn	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC643 **Seminar in Solo Vocal Literature I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC443; or students who have taken courses with comparable content may contact the department.

An intensive study of solo vocal literature from its origin to the present.

0101	Michael Baitzer W 3:00pm - 5:30pm	Seats (Total: 15) ONLINE

MUSC646 **Introduction to Musicology**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Graduate student standing in in the School of Music. Credit only granted for: MUSC648 or MUSC646.

An introduction to the basics of musicological research, including sources, methodologies, and techniques, as well as the fundamentals of both academic and non-academic writing.

0101	Olga Haldey TuTh 11:00am - 12:15pm	Seats (Total: 10) ONLINE

MUSC648 **Seminar in Music Research; Seminar in Music Research**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

An introduction to graduate study in the history and literature of music. Bibliography and methodology of systematic and historical musicology.

0101	Lars Helgert Tu 7:00pm - 9:30pm	Seats (Total: 15) ONLINE
0201	Barbara Haggh-Huglo M 7:00pm - 9:30pm	Seats (Total: 15) ONLINE
0301	Jessica Grimmer TuTh 9:30am - 10:45am	Seats (Total: 15) ONLINE
0401	Lars Helgert Th 7:00pm - 9:30pm	Seats (Total: 15) ONLINE

MUSC649A **Ensemble; University of Maryland Chorale**

(Perm req)

Credits: 1 Grading Method: Regular

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Jonathan King, Minji Kim	Seats (Total: 10)	
	TuTh 4:30pm - 6:00pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC649B **Ensemble; Chamber Singers**

(Perm req)

Credits: 1 Grading Method: Regular

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Edward Maclary	Seats (Total: 10)	
	MW 3:00pm - 3:50pm	PAC 2201	Lab
	TuTh 3:30pm - 4:20pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC649E **Ensemble; Ensemble: Gospel Choir**

Credits: 1 Grading Method: Regular

0101	Anne Carswell	Seats (Total: 10)	
	Th 7:00pm - 10:00pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC649M **Ensemble; Men's Chorus**

Credits: 1 Grading Method: Regular

0101	Timothy Keeler	Seats (Total: 10)	
	MWF 12:00pm - 12:50pm	PAC 1230	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC649O **Ensemble; Opera Chorus**

(Perm req)

Credits: 1 Grading Method: Regular

0101	Edward Maclary	Seats (Total: 15)	
	F 3:30pm - 5:30pm	PAC 2170	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC649W **Ensemble; Treble Choir**

Credits: 1 Grading Method: Regular

0101	Kenneth Elpus	Seats (Total: 10)	
	MWF 12:00pm - 12:50pm	PAC 2201	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC653 **Jazz Improvisation I**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC653 or MUSC699Z. Formerly: MUSC699Z.

Study of improvisational techniques and historical styles of jazz, including study of jazz "language" through transcription and analysis of recorded solos, and the exploration of creative processes and philosophical concepts.

0101	Tim Powell	Seats (Total: 8)	
	M 7:30pm - 9:30pm	PAC 1208	
	Class time/details on ELMs	ONLINE	Lab

MUSC655 **Theory of Jazz**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC655 ir MUSC699J. Formerly: MUSC699J.

Analysis of jazz harmony, with emphasis on principles of substitution, reharmonization, and syntax. Topics may also include chord/scale relationships, phrasing, articulation, notation and orchestration.

0101	Tim Powell	Seats (Total: 12)	
	TuTh 3:30pm - 4:45pm	PAC 3168	
	Class time/details on ELMs	ONLINE	

MUSC659A **Seminar in Repertoire and Pedagogy**

(Perm req)

Credits: 2-3 Grading Method: Regular

Analysis and preparation of choral master works from all major style periods for the purpose of successful rehearsal and performance by conductors.

0101	Edward Maclary MW 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 6) PAC 3160 ONLINE

MUSC659B **Seminar in Repertoire and Pedagogy; Orchestral Repertoire and Pedagogy**

(Perm req)

Credits: 2-3 Grading Method: Regular

Analysis and preparation of choral master works from all major style periods for the purpose of successful rehearsal and performance by conductors.

0101	David Neely Contact instructor or department for details.	Seats (Total: 6)

MUSC659C **Seminar in Repertoire and Pedagogy; Wind Repertoire and Pedagogy**

(Perm req)

Credits: 2-3 Grading Method: Regular, Audit

Analysis and preparation of choral master works from all major style periods for the purpose of successful rehearsal and performance by conductors.

0101	Michael Votta Contact instructor or department for details.	Seats (Total: 5)

MUSC660 **String Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC400S or MUSC660.

A study of major string pedagogical treatises, and an evaluation of string pedagogical techniques, materials, and procedures.

0101	Irina Muresanu, Eric Kutz M 5:00pm - 7:30pm Class time/details on ELMs	Seats (Total: 15) PAC 2201 ONLINE

MUSC669C **Orchestral Excerpts for String Players; Violin**

Credits: 1 Grading Method: Regular, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	David Salness	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC669D **Orchestral Excerpts for String Players; Viola**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Katherine Murdock	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC669F **Orchestral Excerpts for String Players; Bass**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Richard Barber	Seats (Total: 15)
	W 4:30pm - 5:45pm Class time/details on ELMs	Location: TBA ONLINE

MUSC669V **Orchestral Excerpts for String Players; Harp**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Sarah Fuller	Seats (Total: 5)
	Contact instructor or department for details.	

MUSC677 **Introduction to Ethnomusicology**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARHU-School of Music department.

An introduction to the field of ethnomusicology: its origins as comparative musicology, its establishment as an autonomous discipline, and its contemporary trajectories.

0101	John Witzleben W 3:30pm - 6:00pm	Seats (Total: 12) ONLINE

MUSC679N **Seminar in Ethnomusicology; Music and Nation Building**

(Perm req)

Credits: 3 Grading Method: Regular

Seminar topics address current issues, including gender, the social economy of music, ethnography of performance, etc.

0101	Fernando Rios M 3:30pm - 6:00pm	Seats (Total: 12) ONLINE

MUSC689 **Advanced Conducting**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

A concentrated study of the conducting techniques involved in the repertoire of all historical periods.

0101	David Neely M 1:00pm - 3:30pm Class time/details on ELMs	Seats (Total: 5) PAC 2531 ONLINE

MUSC699 **Selected Topics in Music**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSC699I **Selected Topics in Music; Music and Dance: An Introduction to Choreomusical Analysis**

Credits: 3 Grading Method: Regular, Audit

Cross-listed with MUSC448I. Credit granted for MUSC448I or MUSC699I.

0101	Gretchen Horlacher MW 2:00pm - 3:15pm	Seats (Total: 12) ONLINE

MUSC699R **Selected Topics in Music; Readings in Russian and Soviet Music**

Credits: 1-3 Grading Method: Regular, Audit

0101	Olga Haldey W 6:30pm - 9:00pm	Seats (Total: 12) ONLINE

MUSC699T **Selected Topics in Music; Critical Concepts in Music Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Dora Hanninen TuTh 11:00am - 12:15pm	Seats (Total: 8) ONLINE

MUSC699W **Selected Topics in Music; Instrumental Pedagogy**

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSC757 **Aural Skills for Conductors**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Permission of ARHU-School of Music department.

Advanced musicianship skills necessary for conductors.

0101	Michael Votta Tu 12:30pm - 1:30pm W 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 5) PAC 2126 PAC 2126 ONLINE

MUSC758 **Advanced Aural Skills for Conductors**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Continuation of MUSC757, advanced aural skills necessary for conductors.

0101	Michael Votta W 1:00pm - 2:15pm Class time/details on ELMs	Seats (Total: 5) PAC 2126 ONLINE

MUSC758A **Advanced Aural Skills for Conductors**

Credits: 1 Grading Method: Regular, Audit

Continuation of MUSC757, advanced aural skills necessary for conductors.

0101	Instructor: TBA	Seats (Total: 1)
	Contact instructor or department for details.	

MUSC758B **Advanced Aural Skills for Conductors**

Credits: 1 Grading Method: Regular, Audit

Continuation of MUSC757, advanced aural skills necessary for conductors.

0101	Instructor: TBA	Seats (Total: 1)
	Contact instructor or department for details.	

MUSC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MUSC800A **Advanced Seminar in Music Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sectioning by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Rita Sloan	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC800S **Advanced Seminar in Music Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sectioning by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Irina Muresanu, Eric Kutz M 5:00pm - 7:30pm	Seats (Total: 15) ONLINE	

MUSC800V **Advanced Seminar in Music Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sectioning by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Instructor: TBA W 3:00pm - 5:30pm	Seats (Total: 15) ONLINE	Lab

MUSC800W **Advanced Seminar in Music Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sectioning by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Sarah Frisof Class time/details on ELMs	Seats (Total: 10) ONLINE
0201	Mark Hill Class time/details on ELMs	Seats (Total: 10) ONLINE
0301	Robert DiLutis Class time/details on ELMs	Seats (Total: 10) ONLINE
0401	Erich Heckscher Class time/details on ELMs	Seats (Total: 10) ONLINE

0501	Tim Powell	Seats (Total: 10)	
	Class time/details on ELMs	ONLINE	
0601	Gregory Miller	Seats (Total: 10)	
	Class time/details on ELMs	ONLINE	
0701	Paul Gekker	Seats (Total: 10)	
	Class time/details on ELMs	ONLINE	
0801	Matthew Guilford	Seats (Total: 10)	
	Class time/details on ELMs	ONLINE	
0901	David Fedderly	Seats (Total: 10)	
	Class time/details on ELMs	ONLINE	
1001	Paul Kellner	Seats (Total: 10)	
	Contact instructor or department for details.		
1101	Lee Hinkle	Seats (Total: 10)	
	Contact instructor or department for details.		
1201	Joseph Grimmer	Seats (Total: 5)	
	Contact instructor or department for details.		
1301	Justin Drew	Seats (Total: 5)	
	Contact instructor or department for details.		

MUSC811 **Doctoral Opera Techniques**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC611 or MUSC811.

Techniques for opera performance: Improvisation; Acting I, Scene Study I; and Movement I. Practical application of styles, techniques to operat e repertoire, and methodology seminar.

0101	Craig Kier	Seats (Total: 5)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC813 **Doctoral Opera Techniques III**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: MUSC812; and permission of ARHU-School of Music department. Credit only granted for: MUSC613 and MUSC813.

Continuation of MUSC812. Techniques for opera performance: Scene Study III; Movement III; Acting III Shakespeare; Dance I; Stage Combat II; Stage Combat II; and methodology seminar.

0101	Craig Kier	Seats (Total: 5)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab
	Class time/details on ELMs	ONLINE	Lab

MUSC830A **Doctoral Seminar in Music Literature**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Must have completed at least twelve hours in music history and literature.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music; required of all candidates for the D.M.A. Degree in literature-performance.

0101	Michael Baitzer	Seats (Total: 15)
	W 3:00pm - 5:30pm	PAC 2160

MUSC830P **Doctoral Seminar in Music Literature**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Must have completed at least twelve hours in music history and literature.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music; required of all candidates for the D.M.A. Degree in literature-performance.

0101	Mayron Tsong	Seats (Total: 15)
	M 11:00am - 1:30pm	PAC 3164

MUSC830S **Doctoral Seminar in Music Literature**

(Perm req)

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

Prerequisite: Must have completed at least twelve hours in music history and literature.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music; required of all candidates for the D.M.A. Degree in literature-performance.

0201	Sarah Fuller Contact instructor or department for details. Class time/details on ELMs	Seats (Total: 5) ONLINE

MUSC830V **Doctoral Seminar in Music Literature**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed at least twelve hours in music history and literature.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music; required of all candidates for the D.M.A. Degree in literature-performance.

0101	Michael Baitzer W 3:00pm - 5:30pm	Seats (Total: 15) PAC 2160

MUSC830W **Doctoral Seminar in Music Literature**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed at least twelve hours in music history and literature.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music; required of all candidates for the D.M.A. Degree in literature-performance.

0101	Sarah Frisof Class time/details on ELMs	Seats (Total: 10) ONLINE
0201	Mark Hill Contact instructor or department for details.	Seats (Total: 10)
0301	Robert DiLutis Contact instructor or department for details.	Seats (Total: 10)
0401	Erich Heckscher Contact instructor or department for details.	Seats (Total: 10)
0501	Tim Powell Class time/details on ELMs	Seats (Total: 10) ONLINE

0601	Gregory Miller Class time/details on ELMs	Seats (Total: 10) ONLINE
0701	Paul Gekker Class time/details on ELMs	Seats (Total: 10) ONLINE
0801	Matthew Guilford Class time/details on ELMs	Seats (Total: 10) ONLINE
0901	David Fedderly Class time/details on ELMs	Seats (Total: 10) ONLINE
1001	Paul Kellner Class time/details on ELMs	Seats (Total: 10) ONLINE
1101	Lee Hinkle Class time/details on ELMs	Seats (Total: 10) ONLINE
1201	Joseph Grimmer Class time/details on ELMs	Seats (Total: 5) ONLINE
1301	Justin Drew Class time/details on ELMs	Seats (Total: 5) ONLINE

MUSC832A **Doctoral Seminar in Music Literature**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC831. Restriction: Permission of ARHU-School of Music department.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music.

0101	Rita Sloan Contact instructor or department for details.	Seats (Total: 5)

MUSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

MUSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MUSP Music Performance Fall 2020

MUSP102A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP102D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102P **Music Performance; Euphonium**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP102T **Music Performance; Composition**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP103A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103O **Music Performance; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP103T **Music Performance; Instrument Composition**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP109A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109O **Music Performance; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP109V **Music Performance; Harp**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110O **Music Performance; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP110V **Music Performance; Harp**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119O **Music Performance; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119S **Music Performance; Guitar**

(Perm req)

Credits: 2-4 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP119T **Music Performance; Composition**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP119V **Music Performance; Harp**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP119W **Music Performance; Electronic Composition**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120O **Music Performance; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120T **Music Performance; Composition**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120V **Music Performance; Harp**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP120W **Music Performance; Electronic Composition**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202P **Music Performance; Euphonium**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202Q **Music Performance; Percussion**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP202S **Music Performance; Guitar**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203A **Music Performance; Piano**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203B **Music Performance; Voice**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203O **Music Performance; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP203V **Music Performance**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP207A **Music Performance; Piano**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207B **Music Performance; Voice**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207C **Music Performance; Violin**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207D **Music Performance; Viola**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207E **Music Performance; Cello**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207O **Music Performance; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207V **Music Performance; Harp**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208C **Music Performance; Music Performanc: Violin**

Credits: 2-4 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP208D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208P **Music Performance; Euphonium**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP208V **Music Performance; Harp**

(Perm req)

Credits: 2-4 Grading Method: Regular

Contact department for information to register for this course.

MUSP217A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217P **Music Performance; Euphonium**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217Q **Music Performance; Percussion**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217S **Music Performance; Guitar**

(Perm req) Credits: 2-4 Grading Method: Regular

Contact department for information to register for this course.

MUSP217T **Music Performance; Composition**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217V **Music Performance; Harp**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP217W **Music Performance; Electronic Composition**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218A **Music Performance; Piano**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218B **Music Performance; Voice**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218O **Music Performance; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218T **Music Performance; Composition**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218V **Music Performance; Harp**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP218W **Music Performance; Electronic Composition**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302A **Music Performance; Piano**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302B **Music Performance; Voice**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302C **Music Performance; Violin**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302D **Music Performance; Viola**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302E **Music Performance; Cello**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP302K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302O **Music Performance; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP302V **Music Performance; Harp**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP303V **Music Performance; Harp**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP305A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305L **Music Performance; Horn**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305M **Music Performance; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305N **Music Performance; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305O **Music Performance; Tuba**

(Perm req)

Credits: 2-4 Grading Method: Regular

Contact department for information to register for this course.

MUSP305P **Music Performance; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305Q **Music Performance; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305S **Music Performance; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP305V **Music Performance; Harp**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306A **Music Performance; Piano**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306B **Music Performance; Voice**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306C **Music Performance; Violin**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306D **Music Performance; Viola**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306E **Music Performance; Cello**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306F **Music Performance; Bass**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306G **Music Performance; Flute**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306H **Music Performance; Oboe**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306I **Music Performance; Clarinet**

(Perm req)

Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP306J **Music Performance; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP306K **Music Performance; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP306L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP306M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP306N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP306O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP306P **Music Performance; Euphonium**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP306Q **Music Performance; Percussion**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP306S **Music Performance; Guitar**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP306V **Music Performance; Harp**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315A **Music Performance; Piano**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315B **Music Performance; Voice**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315C **Music Performance; Violin**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315D **Music Performance; Viola**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315E **Music Performance; Cello**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315P **Music Performance; Euphonium**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315Q **Music Performance; Percussion**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315S **Music Performance; Guitar**

(Perm req)

Credits: 2-4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315T **Music Performance; Composition**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315V **Music Performance; Harp**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315W **Music Performance; Electronic Composition**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316A **Music Performance; Piano**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316B **Music Performance; Voice**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316C **Music Performance; Violin**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316D **Music Performance; Viola**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316E **Music Performance; Cello**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316P **Music Performance; Euphonium**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316Q **Music Performance; Percussion**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316T **Music Performance; Composition**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316V **Music Performance; Harp**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP316W **Music Performance; Electronic Composition**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP402A **Music Performance; Piano**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402B **Music Performance; Voice**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402C **Music Performance; Violin**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402D **Music Performance; Viola**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402E **Music Performance; Cello**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402P **Music Performance; Euphonium**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402Q **Music Performance; Percussion**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402S **Music Performance; Guitar**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403A **Music Performance; Piano**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403B **Music Performance; Voice**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403C **Music Performance; Violin**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403D **Music Performance; Viola**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403E **Music Performance; Cello**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403K **Music Performance; Saxophone**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403L **Music Performance; Horn**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403M **Music Performance; Trumpet**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403N **Music Performance; Trombone**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403O **Music Performance; Tuba**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403P **Music Performance; Euphonium**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403Q **Music Performance; Percussion**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403S **Music Performance; Guitar**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP409A **Music Performance; Piano**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409B **Music Performance; Voice**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409C **Music Performance; Violin**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409D **Music Performance; Viola**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409E **Music Performance; Cello**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409P **Music Performance; Euphonium**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409Q **Music Performance; Percussion**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409S **Music Performance; Guitar**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409V **Music Performance; Harp**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP410A **Music Performance; Piano**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410B **Music Performance; Voice**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410C **Music Performance; Violin**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410D **Music Performance; Viola**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410E **Music Performance; Cello**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410O **Music Performance; Tuba**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410P **Music Performance; Euphonium**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410Q **Music Performance; Percussion**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410S **Music Performance; Guitar**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410V **Music Performance; Harp**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP419A **Music Performance; Piano**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419B **Music Performance; Voice**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419C **Music Performance; Violin**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419D **Music Performance; Viola**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419E **Music Performance; Cello**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419F **Music Performance; Bass**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419H **Music Performance; Oboe**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419I **Music Performance; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419J **Music Performance; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419K **Music Performance; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419L **Music Performance; Horn**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419M **Music Performance; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419N **Music Performance; Trombone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419O **Music Performance; Tuba**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419P **Music Performance; Euphonium**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419Q **Music Performance; Percussion**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419S **Music Performance; Guitar**

(Perm req)

Credits: 2

Grading Method: Regular

Senior course in the major series.

Contact department for information to register for this course.

MUSP419T **Music Performance; Composition**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419V **Music Performance; Harp**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419W **Music Performance; Electronic Composition**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP420A **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420B **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420C **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420D **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420E **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420F **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420G **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420H **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420I **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420J **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420K **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420L **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420M **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420N **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420O **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420P **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420Q **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420T **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420V **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420W **Senior Recital; Senior Recital**

(Perm req) Credits: 4 Grading Method: Regular, Audit General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP609A **Interpretation and Repertoire; Piano**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609B **Interpretation and Repertoire; Voice**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609D **Interpretation and Repertoire; Viola**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609E **Interpretation and Repertoire; Cello**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609F **Interpretation and Repertoire; Bass**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609G **Interpretation and Repertoire; Flute**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609H **Interpretation and Repertoire; Oboe**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609I **Interpretation and Repertoire; Clarinet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609J **Interpretation and Repertoire; Bassoon**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609K **Interpretation and Repertoire; Saxophone**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609L **Interpretation and Repertoire; Horn**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609M **Interpretation and Repertoire; Trumpet**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609N **Interpretation and Repertoire; Trombone**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609O **Interpretation and Repertoire; Tuba**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609P **Interpretation and Repertoire; Euphonium**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609Q **Interpretation and Repertoire; Percussion**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609S **Interpretation and Repertoire; World Instruments**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609T **Interpretation and Repertoire; Composition**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609U **Interpretation and Repertoire; Conducting**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609V **Interpretation and Repertoire; Harp**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP609X **Interpretation and Repertoire; Historical Instruments - Keyboard**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610A **Graduate Music Performance; Piano**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610B **Graduate Music Performance; Voice**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610D **Graduate Music Performance; Viola**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610E **Graduate Music Performance; Cello**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610F **Graduate Music Performance; Bass**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610G **Graduate Music Performance; Flute**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610H **Graduate Music Performance; Oboe**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610I **Graduate Music Performance; Clarinet**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610J **Graduate Music Performance; Bassoon**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610K **Graduate Music Performance; Saxophone**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610L **Graduate Music Performance; Horn**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610M **Graduate Music Performance; Trumpet**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610N **Graduate Music Performance; Trombone**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610O **Graduate Music Performance; Tuba**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610P **Graduate Music Performance; Euphonium**

(Perm req) Credits: 4 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610Q **Graduate Music Performance; Percussion**

(Perm req) Credits: 4 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610S **Graduate Music Performance; Guitar**

(Perm req) Credits: 4 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610T **Graduate Music Performance; Composition**

(Perm req) Credits: 4 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610U **Graduate Music Performance; Conducting**

(Perm req) Credits: 4 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610V **Graduate Music Performance; Harp**

(Perm req) Credits: 4 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP610X **Graduate Music Performance; Historical Instruments - Keyboard**

(Perm req) Credits: 4 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP619A **Interpretation and Repertoire; Piano**

(Perm req) Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619B **Interpretation and Repertoire; Voice**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619C **Interpretation and Repertoire; Violin**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619D **Interpretation and Repertoire; Viola**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619E **Interpretation and Repertoire; Cello**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619F **Interpretation and Repertoire; Bass**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619G **Interpretation and Repertoire; Flute**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619H **Interpretation and Repertoire; Oboe**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619I **Interpretation and Repertoire; Clarinet**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619J **Interpretation and Repertoire; Bassoon**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619K **Interpretation and Repertoire; Saxophone**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619L **Interpretation and Repertoire; Horn**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619M **Interpretation and Repertoire; Trumpet**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619N **Interpretation and Repertoire; Trombone**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619O **Interpretation and Repertoire; Tuba**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619P **Interpretation and Repertoire; Euphonium**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619Q **Interpretation and Repertoire; Percussion**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619S **Interpretation and Repertoire; Guitar**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619T **Interpretation and Repertoire; Composition**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619U **Interpretation and Repertoire; Conducting**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619V **Interpretation and Repertoire; Harp**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619W **Interpretation and Repertoire; Electronic Composition**

(Perm req)

Credits: 2-4 Grading Method: Regular, Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619X **Interpretation and Repertoire; Opera**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP620A **Graduate Music Performance; Piano**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620B **Graduate Music Performance; Voice**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620C **Graduate Music Performance; Violin**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620D **Graduate Music Performance; Viola**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620E **Graduate Music Performance; Cello**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620F **Graduate Music Performance; Bass**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620G **Graduate Music Performance; Flute**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620H **Graduate Music Performance; Oboe**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620I **Graduate Music Performance; Clarinet**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620J **Graduate Music Performance; Bassoon**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620K **Graduate Music Performance; Saxophone**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620L **Graduate Music Performance; Horn**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620M **Graduate Music Performance; Trumpet**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620N **Graduate Music Performance; Trombone**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620O **Graduate Music Performance; Tuba**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620P **Graduate Music Performance; Euphonium**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620Q **Graduate Music Performance; Percussion**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620S **Graduate Music Performance; Guitar**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620T **Graduate Music Performance; Composition**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620U **Graduate Music Performance; Conducting**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620V **Graduate Music Performance; Harp**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620W **Graduate Music Performance; Electronic Composition**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620X **Graduate Music Performance; Opera**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP621A **Interpretation, Repertoire, and Performance**

(Perm req)

Credits: 2-4 Grading Method: Regular

Prerequisite: MUSP619. Corequisite: MUSC758. Restriction: Permission of ARHU-School of Music department.

Private music instruction in preparation for public performance.

Contact department for information to register for this course.

MUSP679 **Practicum**

(Perm req)

Credits: 1 Grading Method: Regular

Private individual instruction on a secondary instrument.

Contact department for information to register for this course.

MUSP719A **Interpretation and Repertoire; Piano**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719B **Interpretation and Repertoire; Voice**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719C **Interpretation and Repertoire; Violin**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719D **Interpretation and Repertoire; Viola**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719E **Interpretation and Repertoire; Cello**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719F **Interpretation and Repertoire; Bass**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719G **Interpretation and Repertoire; Flute**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719H **Interpretation and Repertoire; Oboe**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719I **Interpretation and Repertoire; Clarinet**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719J **Interpretation and Repertoire; Bassoon**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719K **Interpretation and Repertoire; Saxophone**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719L **Interpretation and Repertoire; Horn**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719M **Interpretation and Repertoire; Trumpet**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719N **Interpretation and Repertoire; Trombone**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719O **Interpretation and Repertoire; Tuba**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719P **Interpretation and Repertoire; Euphonium**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719Q **Interpretation and Repertoire; Percussion**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719T **Interpretation and Repertoire; Composition**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719U **Interpretation and Repertoire; Conducting**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719V **Interpretation and Repertoire; Harp**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719W **Interpretation and Repertoire; Electronic Composition**

(Perm req)

Credits: 2-4

Grading Method: Regular, Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP815A **Interpretation, Performance, and Pedagogy; Piano**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815B **Interpretation, Performance, and Pedagogy; Voice**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815C **Interpretation, Performance, and Pedagogy; Violin**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815D **Interpretation, Performance, and Pedagogy; Viola**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815E **Interpretation, Performance, and Pedagogy; Cello**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815F **Interpretation, Performance, and Pedagogy; Bass**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815G **Interpretation, Performance, and Pedagogy; Flute**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815H **Interpretation, Performance, and Pedagogy; Oboe**

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815I **Interpretation, Performance, and Pedagogy; Clarinet**

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815J **Interpretation, Performance, and Pedagogy; Bassoon**

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815K **Interpretation, Performance, and Pedagogy; Saxophone**

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815L **Interpretation, Performance, and Pedagogy; Horn**

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815M **Interpretation, Performance, and Pedagogy; Trumpet**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815N **Interpretation, Performance, and Pedagogy; Trombone**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815O **Interpretation, Performance, and Pedagogy; Tuba**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815P **Interpretation, Performance, and Pedagogy; Euphonium**

(Perm req)

Credits: 4 Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815Q **Interpretation, Performance, and Pedagogy; Percussion**

(Perm req)

Credits: 4 Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815T **Interpretation, Performance, and Pedagogy; Composition**

(Perm req)

Credits: 4 Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815U **Interpretation, Performance, and Pedagogy; Conducting**

(Perm req)

Credits: 4 Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815W **Interpretation, Performance, and Pedagogy; Electronic Composition**

(Perm req)

Credits: 4 Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP816A **Interpretation, Performance, and Pedagogy; Piano**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816B **Interpretation, Performance, and Pedagogy; Voice**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816C **Interpretation, Performance, and Pedagogy; Violin**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816D **Interpretation, Performance, and Pedagogy; Viola**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816E **Interpretation, Performance, and Pedagogy; Cello**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816F **Interpretation, Performance, and Pedagogy; Bass**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816G **Interpretation, Performance, and Pedagogy; Flute**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816H **Interpretation, Performance, and Pedagogy; Oboe**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816I **Interpretation, Performance, and Pedagogy; Clarinet**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816J **Interpretation, Performance, and Pedagogy; Bassoon**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816K **Interpretation, Performance, and Pedagogy; Saxophone**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816L **Interpretation, Performance, and Pedagogy; Horn**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816M **Interpretation, Performance, and Pedagogy; Trumpet**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816N **Interpretation, Performance, and Pedagogy; Trombone**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816O **Interpretation, Performance, and Pedagogy; Tuba**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816P **Interpretation, Performance, and Pedagogy; Euphonium**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816Q **Interpretation, Performance, and Pedagogy; Percussion**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816T **Interpretation, Performance, and Pedagogy; Composition**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816U **Interpretation, Performance, and Pedagogy; Conducting**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816V **Interpretation, Performance, and Pedagogy; Harp**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816W **Interpretation, Performance, and Pedagogy; Electronic Composition**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816X **Interpretation, Performance, and Pedagogy**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817A **Interpretation, Performance, and Pedagogy; Piano**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817B **Interpretation, Performance, and Pedagogy; Voice**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817C **Interpretation, Performance, and Pedagogy; Violin**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817D **Interpretation, Performance, and Pedagogy; Viola**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817E **Interpretation, Performance, and Pedagogy; Cello**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817F **Interpretation, Performance, and Pedagogy; Bass**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817G **Interpretation, Performance, and Pedagogy; Flute**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817H **Interpretation, Performance, and Pedagogy; Oboe**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817I **Interpretation, Performance, and Pedagogy; Clarinet**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817J **Interpretation, Performance, and Pedagogy; Bassoon**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817K **Interpretation, Performance, and Pedagogy; Saxophone**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817L **Interpretation, Performance, and Pedagogy; Horn**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817M **Interpretation, Performance, and Pedagogy; Trumpet**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817N **Interpretation, Performance, and Pedagogy; Trombone**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817O **Interpretation, Performance, and Pedagogy; Tuba**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817P **Interpretation, Performance, and Pedagogy; Euphonium**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817Q **Interpretation, Performance, and Pedagogy; Percussion**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817T **Interpretation, Performance, and Pedagogy; Composition**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817U **Interpretation, Performance, and Pedagogy; Conducting**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817W **Interpretation, Performance, and Pedagogy; Electronic Composition**

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817X **Interpretation, Performance, and Pedagogy**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

MUSP899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

NACS Neuroscience & Cognitive Science Fall 2020

NACS608 **Neuroscience and Cognitive Science Seminar**

Credits: 1 Grading Method: Regular

Special seminar topics in Neuroscience and Cognitive Science.

0101	Ricardo Araneda	Seats (Total: 20)
	F 10:15am - 11:15am	ONLINE

NACS641 **Introduction to Neurosciences**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Restriction: Permission of instructor.

Detailed examination of neurophysiology and sensorimotor systems.

0101	Jens Herberholz	Seats (Total: 15)
	MW 3:00pm - 4:45pm	ONLINE

NACS643 **Computational Neuroscience**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: NACS641; and must have completed a course in calculus; and permission of instructor.

Provides a mathematical foundation in computational neuroscience.

0101	Daniel Butts	Seats (Total: 20)
	MW 12:00pm - 1:50pm	ONLINE

NACS645 **Cognitive Science**

Credits: 4 Grading Method: Regular, Audit

Credit only granted for: NACS645 or NACS728Y. Formerly: NACS728Y.

A study of mental representations and computations. Issues examined include computation, representations, decisions, modularity, evolution, innateness, and reductionism.

0101	Naomi Feldman	Seats (Total: 25)
	TuTh 10:00am - 11:45am	ONLINE

NACS728F **Selected Topics in Neuroscience and Cognitive Science**

Credits: 2-4 Grading Method: Regular, Audit

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

0101	Luiz Pessoa	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

NACS728J **Selected Topics in Neuroscience and Cognitive Science; Neurobiology of Chemosensory Systems**

Credits: 3 Grading Method: Regular

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

0101	Ricardo Araneda	Seats (Total: 7)
	MW 2:00pm - 3:15pm	BPS 1250

NACS728N **Selected Topics in Neuroscience and Cognitive Science; Diseases of the Nervous System**

Credits: 3 Grading Method: Regular, Audit

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

0101	Quentin Gaudry	Seats (Total: 8)
	TuTh 11:00am - 12:15pm	ONLINE

NACS728O **Selected Topics in Neuroscience and Cognitive Science; Hormones and Behavior**

Credits: 2-4 Grading Method: Regular, Audit, Sat-Fail

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

0101	Erica Glasper Andrews	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ONLINE

NACS798 **Master's Non-Thesis Research**

Credits: 1-3 Grading Method: Regular

Individual research course for NACS non-thesis MS degree

Contact department for information to register for this course.

NACS799 **Master's Thesis Research**

Credits: 1-3 Grading Method: Sat-Fail

Individualized research course for NACS thesis MS degree

Contact department for information to register for this course.

NACS898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

NACS899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Indivdual instruction course: contact department or instructor to obtain section number

Contact department for information to register for this course.

NAVY Navy Fall 2020

NAVY100 **Introduction to Naval Science**

Credits: 3 Grading Method: Regular

Introduction to the naval profession and concepts of sea power. Major topics explored are the mission, strategy, organization, and descriptions of the U.S. Navy and Marine Corps. Students will gain a basic understanding of warfighting capabilities, required leadership skills, training and education, and the duties and responsibilities of a U.S. Navy and Marine Corps Junior Officer. The student will learn Naval courtesy and customs, military justice, and nomenclature as well as the professional competencies required to become a naval officer.

0101	Barry Feinstein MW 8:00am - 9:15am	Seats (Total: 75) ARM 0126
FC01	Barry Feinstein MW 8:00am - 9:15am *Restricted to students in Freshmen Connection.*	Seats (Total: 10) ARM 0131

NAVY108 **Naval Science Leadership Lab**

Credits: 1 Grading Method: Regular

Introduces the student to a variety of instructional sessions and/or activities that will develop the leadership component of the Naval ROTC program. The Naval Science leadership lab may include, but not be limited to, close-order drill, physical fitness training, ceremonial functions, Department of the Navy policy, guest lecturers, general military training (GMT), Anti-Terrorism Force Protection (ATFP), traffic safety, nutrition, stress management, prevention of sexual harassment, and operations security.

0101	Michael O'Hara, Troy Mong Th 6:00am - 7:50am Th 6:00am - 7:50am Th 6:00am - 7:50am	Seats (Total: 150) ESJ 0202 ESJ 1202 ESJ 0224
FC01	Troy Mong, Michael O'Hara Th 6:00am - 7:50am *Restricted to students in Freshmen Connection.*	Seats (Total: 10) ESJ 1215

NAVY200 **Leadership and Management**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students enrolled in the NROTC program.

Introductory course designed to familiarize students with the theories, processes, and behaviors that enable effective leadership and managerial competence. Students will engage in analytical discussions, review leadership development and education, and Navy/Marine Corps-based case study discussions in order to develop their understanding of personal strengths, values and growth opportunities in the context of team, group and organizational leadership.

0101	Stephen Kosloski TuTh 8:00am - 9:15am	Seats (Total: 40) SKN 0200

NAVY300 **Naval Ship Systems I (Engineering)**

(Perm req)

Credits: 3 Grading Method: Regular

Recommended: MATH140 and MATH141. Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students enrolled in the NROTC program.

Introduces the student to a comprehensive fundamental understanding of United States naval engineering principles and systems. Topics include thermodynamics, incompressible fluid flow, electrical theory, hydraulics and pneumatics, power train components, fluid/lube oil systems, desalination, fundamentals of nuclear power, propulsion systems (internal combustion, gas turbines, and steam), electrical distribution, ship stability and control and damage control. Students will also examine case studies to apply and analyze course topics within naval ships systems contexts.

0101	Joseph McAndrews MW 8:00am - 9:15am	Seats (Total: 25) ARM 0135

NAVY400 **Naval Operations and Seamanship**

(Perm req) Credits: 3 Grading Method: Regular General Education: DSSP

Recommended: NAVY201. Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students enrolled in the NROTC program.

Capstone course for senior NROTC Navy-option midshipmen in advanced navigation, communications, naval operations, and naval warfare. Students learn through simulation in a computer classroom known as the Maritime Skills Simulator (MSS), in addition to lectures, discussions, and qualitative and quantitative tests/examinations. Students will engage in discussions regarding the moral and ethical responsibilities or military leaders, as well as the essential attributes of character required for effective leadership.

0101	Barry Feinstein	Seats (Total: 19)
	TuTh 8:00am - 9:15am	ARM 0120

NEUR Neuroscience Fall 2020

NEUR200 Introduction to Neuroscience

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS

Prerequisite: Minimum grade of C- in BSCI170 and BSCI171. Cross-listed with: PSYC202. Credit only granted for: PSYC309U, NEUR200, PSYC202 or PSYC301. Formerly: PSYC309U.

In an evolutionary sense, the job of the nervous system is to produce, control, and coordinate behaviors that help an animal survive and reproduce. Neuroscience is the study of how the nervous system does that. Provides a broad introduction to neuroscience, always keeping the behavioral consequences in view.

0101	David Yager	Seats (Total: 175)
	MW 12:30pm - 1:45pm	ONLINE

NEUR305 Neural Systems and Circuits

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH120 or higher MATH course; and a minimum grade of C- in NEUR200 or BSCI353; or equivalent.

Overview of the fundamental principles underlying the systems and circuits of the human nervous system, with a focus on cognitive processes and how these systems interact. Students will engage in the analysis of case studies, apply their knowledge of the neural circuitry to explain everyday phenomena, hypothesize ways to further investigate the nervous system, and propose how knowledge of neural circuits can be used in human society and the resulting implications.

0101	Amanda Chicoli MWF 1:00pm - 1:50pm	Seats (Total: 40) ONLINE	

NEUR306 **Cellular and Molecular Neuroscience**

Credits: 3 Grading Method: Regular

Prerequisite: Earning C- or higher in NEUR200 or BSCI330. Corequisite: Concurrent or previous enrollment in PHYS132 (or equivalent). Credit only granted for: NEUR306 or BSCI353.

Students will gain an appreciation of neuroscience as the nexus of chemistry, physics, and biology. Additionally, they will gain an understanding of how: both individual and networks of neurons function as variable electrical circuits; our nervous systems transduce signals from the outside world and sets-off molecular cascades; the behavior of a neuron can be changed and or remain the same in response to changing variables. Techniques used to study the nervous system at a cellular and molecular level will be discussed.

0101	Chan Lin TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE	

NFSC Nutrition and Food Science Fall 2020

The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to contact the instructor, prior to course enrollment, to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required and what alternatives, if any, are available.

NFSC100 **Elements of Nutrition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS General Education: DSNS

Fundamentals of human nutrition. Nutrient requirements related to changing individual and family needs.

0101	Hee-Jung Song Class time/details on ELMs Th 8:30am - 9:20am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Hee-Jung Song Class time/details on ELMs W 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0104	Hee-Jung Song Class time/details on ELMs Th 12:30pm - 1:20pm	Seats (Total: 25) ONLINE ONLINE	Discussion
0105	Hee-Jung Song Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0106	Hee-Jung Song Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0107	Hee-Jung Song Class time/details on ELMs W 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0108	Hee-Jung Song Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
0109	Hee-Jung Song Class time/details on ELMs Tu 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
0112	Hee-Jung Song Class time/details on ELMs W 3:00pm - 3:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
0113	Hee-Jung Song Class time/details on ELMs W 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
0114	Hee-Jung Song Class time/details on ELMs Th 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0115	Hee-Jung Song Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion

FC01	Hee-Jung Song, Nadine Sahyoun, Shaik Rahaman, Seong-Ho Lee Class time/details on ELMs F 11:30am - 12:20pm *Restricted to students in Freshmen Connection.*	Seats (Total: 26) ONLINE ONLINE	Discussion
FC02	Hee-Jung Song, Seong-Ho Lee, Shaik Rahaman, Nadine Sahyoun Class time/details on ELMs F 1:00pm - 1:50pm *Restricted to students in Freshmen Connection.*	Seats (Total: 26) ONLINE ONLINE	Discussion

NFSC100H **Elements of Nutrition**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: LS | General Education: DSNS

Fundamentals of human nutrition. Nutrient requirements related to changing individual and family needs.

For general honors students only.

0101	Hee-Jung Song Class time/details on ELMs Tu 3:00pm - 3:50pm	Seats (Total: 12) ONLINE ONLINE	Discussion

NFSC112 **Food: Science and Technology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: LS | General Education: DSNS

Introduction to the realm of food science, food technology and food processing. An overview of the largest industry in the U.S. with emphasis on the science of food and the technology of food preservation from harvest through processing and packaging to distribution and consumer utilization.

0101	Qin Wang, Abani Pradhan Class time/details on ELMs Th 12:30pm - 1:20pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0102	Qin Wang, Abani Pradhan Class time/details on ELMs Th 4:00pm - 4:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion

0103	Abani Pradhan, Qin Wang Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0104	Abani Pradhan, Qin Wang Class time/details on ELMs F 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0105	Qin Wang, Abani Pradhan Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0106	Qin Wang, Abani Pradhan Class time/details on ELMs W 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
FC01	Qin Wang, Abani Pradhan Class time/details on ELMs M 3:00pm - 3:50pm *Restricted to students in Freshmen Connection.*	Seats (Total: 25) ONLINE ONLINE	Discussion

NFSC220 **Diet: Is it a cause or a solution**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSSP, SCIS

If diet is a very straightforward topic; then why and how does this simple matter result in complicated health problems? Diet can provide a simple solution to numerous health issues. So, why do many people fail to follow this seemingly simple solution and still suffer from obesity and other diet-related diseases? Diet is a topic that most people know but few people understand. In addition, diet has become one of the most important lenses for looking at a variety of social, economic, and cultural issues. Since the concept of diet is continuum and has multifaceted aspects, we need to understand it in broad and multidisciplinary perspectives including social, cultural and economic aspects.

0101	Monica Whent MWF 12:00pm - 12:50pm	Seats (Total: 36) ONLINE	

NFSC230 **Global Nutrition Sensitive Food Systems**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: N/A. Corequisite: N/A. Recommended: NFSC100 Elements of Nutrition, NFSC112 Food: Science and Technology. Restriction: none.

The United Nations' Sustainable Development Goals (SDGs) (Goal 2) aims to end hunger, achieve food security, improve nutrition and promote sustainable agriculture by 2030. The West African sub region is among the most food insecure regions in the world, with an estimated 31% of the population projected to be food insecure by 2024. Additionally, the World Health Organization (WHO) estimates that by 2020, Non Communicable Diseases (NCDs) will account for 80 percent of the global burden of disease, causing seven out of every 10 deaths in developing countries. To avert this situation, an integrated approach that involves all stakeholders - producers, processors, distributors, consumers, policy makers and research institutions - must be developed. A number of initiatives have already been implemented to examine how agriculture could be leveraged to become a more powerful tool to tackle the persistent problems of food insecurity, malnutrition, and poor health. This course will seek to build on the momentum created by these and similar conversations and initiatives to prepare students and participants to develop global solutions fit for local contexts that bridge the gap between agricultural development and its largely unfulfilled health and nutritional benefits. Our focus will be on Ghana, Africa. The course will be taught online by the faculty from the University of Maryland and Kwame Nkrumah University of Science and Technology, Kumasi Ghana.

The online course was approved by the Office of International Affairs, Global Classrooms Initiative. UMD students will have an opportunity to participate in engaging, impactful, and easily accessible credit-bearing international experiences with a focus on Ghana, Africa.

0101	Margaret Udahogora	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

NFSC350 **Foodservice Operations**

(Perm req)

Credits: 5 Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI223 and BMGT364. Restriction: Must be in Nutrition and Food Science: Dietetics program.

Introduction to management. Responsibilities in quantity food production and purchasing in a foodservice operation. Laboratory experience in planning, preparation, and service of meals which meet the nutritional needs of the consumer.

0101	Margaret Udahogora	Seats (Total: 9)	
	TuTh 4:00pm - 5:15pm	ONLINE	
	Tu 8:00am - 1:30pm	MMH 3401	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

0102	Margaret Udahogora	Seats (Total: 9)	
	TuTh 4:00pm - 5:15pm	ONLINE	
	Th 8:00am - 1:30pm	MMH 3401	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		
0103	Margaret Udahogora	Seats (Total: 9)	
	TuTh 4:00pm - 5:15pm	ONLINE	
	Tu 8:00am - 1:30pm	MMH 3401	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		
0104	Margaret Udahogora	Seats (Total: 9)	
	TuTh 4:00pm - 5:15pm	ONLINE	
	Th 8:00am - 1:30pm	MMH 3401	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

NFSC380 **Methods of Nutritional Assessment**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum of C- in NFSC315 and BCHM461. Restriction: Must be in Nutrition and Food Science: Food Science program.

Methods of assessing human nutritional status of populations and individuals. These methods include dietary, anthropometric, clinical evaluations and biochemical measurements.

0101	Margaret Udahogora	Seats (Total: 15)	
	MW 1:00pm - 1:50pm	ONLINE	
	M 2:00pm - 5:00pm	MMH 1400	Lab
0102	Margaret Udahogora	Seats (Total: 15)	
	MW 1:00pm - 1:50pm	ONLINE	
	W 2:00pm - 5:00pm	MMH 1400	Lab

NFSC386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of AGNR-Nutrition and Food Science department. Restriction: Junior standing or higher. Formerly: FDSC386 and NUTR386.

Contact department for information to register for this course.

NFSC388 **Honors Thesis Research**

Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

1301	Qin Wang	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

NFSC399 **Special Problems in Food Science**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Designed for advanced undergraduates. Specific problems in food science will be assigned.

Contact department for information to register for this course.

NFSC421 **Food Chemistry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BCHM461.

Basic chemical and physical concepts are applied to the composition and properties of foods. Emphasis on the relationship of processing technology to the keeping quality, nutritional value, and acceptability of foods.

0101	Uyory Choe	Seats (Total: 60)
	MW 12:30pm - 1:45pm	ONLINE

NFSC422 **Food Product Research and Development**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS General Education: DSSP

Restriction: Senior standing; and must be in a major within AGNR-Nutrition and Food Science department; and permission of AGNR-Nutrition and Food Science department. Formerly: FDSC422.

A capstone course for FDSC majors. A study of the research and development of new food products. Application of food technology, engineering, safety and packaging are integrated by teams of students to develop a new food product from concept to pilot plant scale-up. Students will travel to nearby food processing plants on two to four Saturdays during the semester.

0101	Qin Wang	Seats (Total: 15)	
	W 2:00pm - 2:50pm	BPS 1243	
	F 1:00pm - 5:00pm	MMH 3401	Lab

NFSC423 **Food Chemistry Laboratory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: Must have completed or be concurrently enrolled in NFSC421.

Analysis of the major and minor constituents of food using chemical, physical and instrumental methods in concordance with current food industry and regulatory practices. Laboratory exercises coincide with lecture subjects in NFSC421.

0101	Diana Obanda	Seats (Total: 15)	
	W 8:30am - 9:20am	MMH 3419	
	W 9:30am - 12:20pm	MMH 3419	Lab

NFSC440 **Advanced Human Nutrition**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum of C- in NFSC100, BCHM462 and BSCI440.

A critical study of physiologic, molecular and metabolic influences on utilization of carbohydrates, lipids, proteins, vitamins, macro-and micro- minerals, and nonnutritive components of food. Interactions of these nutrients and food components will be examined relative to maintaining health.

Jointly offered with NFSC678R.

0101	David Lei	Seats (Total: 49)	
	Class time/details on ELMs	ONLINE	

NFSC455 **Medical Nutrition Therapy I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: NFSC380. Corequisite: NFSC440.

Advanced clinical nutrition course for dietetics or nutrition science majors. Modifications of the normal adequate diet to meet human nutritional needs in acute and chronic diseases and metabolic disorders. Includes energy balance and weight management, nutritional genomics, nutrition counseling, autoimmune disease, nutrition for pediatric conditions.

0101	Monica Whent	Seats (Total: 30)	
	MWF 10:00am - 10:50am	ONLINE	
	W 2:00pm - 3:50pm	ONLINE	Lab

NFSC490 **Special Problems in Nutrition**

(Perm req)

Credits: 2-3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: NFSC440; and permission of AGNR-Nutrition and Food Science department.

Individually selected problems in the area of human nutrition.

Contact department for information to register for this course.

NFSC498 **Selected Topics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Selected current aspects of food.

Contact department for information to register for this course.

NFSC498A **Selected Topics; Individual Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Selected current aspects of food.

Contact department for information to register for this course.

NFSC498F **Selected Topics; Current Topics in Nutrition and Chronic Disease**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected current aspects of food.

Prerequisite: NFSC100 or comparable course, or by permission of the instructor. Analysis of current topics related to diet, nutrition, and human health at cellular, molecular and biochemical level. Further, this course will provide overview of the current methods, and in vitro/vivo model systems used in research. Syllabus includes topics relevant to dietary regulation of genes/proteins and their impact on both physiological and pathological conditions including hyperlipidemia, hyperglycemia, and oncogenesis. This course is designed to help students to understand and apply current scientific concepts and research methods, and to obtain necessary skills in evaluation/interpretation of evidence based scientific data.

0101	Shaik Rahaman	Seats (Total: 20)
	M 2:15pm - 5:00pm	MMH 1304

NFSC498K **Selected Topics; The Gut Microbiota, Obesity and Obesity Comorbidities**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected current aspects of food.

0101	Diana Obanda	Seats (Total: 15)
	W 3:00pm - 5:45pm	MMH 1304

NFSC498T **Selected Topics; Advanced Food Processing and Safety**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Selected current aspects of food.

0101	Shauna Henley, Rohan Tikekar	Seats (Total: 10)
	Th 3:00pm - 5:30pm	ONLINE

NFSC498V **Selected Topics; Research Design and Methods in Health Promotion and Nutrition Education**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected current aspects of food.

Cross-listed with NFSC678V. Credit only granted for NFSC678V or NFSC498V. The major goals of this course are to help students understand fundamental behavioral, social models and theories used in the field of nutrition, and to address methodological issues in developing, implementing, and evaluating intervention programs, particularly in the context of nutrition education and behavior. The class topics include types of social and behavioral theories and models applied in the field of nutrition education and public health, conceptual framework building, methodological basics (conceptualizing and operationalizing measurements reliability and validity of scales, psychometric analysis including factor analysis, and issues in evaluating intervention programs.

0101	Hee-Jung Song	Seats (Total: 15)
	F 2:00pm - 4:45pm	ONLINE

NFSC620 **Diet and Cancer Prevention**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: NFSC440; or permission of instructor. Credit only granted for: NFSC620 or NFSC679D. Formerly: NFSC678D.

1. The nature of cancer and the relationship between dietary/nutritional factors and incidence of cancer 2. Basic concepts of general cancer biology with focus on effects of dietary components on genes and their encoded proteins, epigenetic changes and cell signaling 3. Effect of dietary factors in various types of cancer with respect to the benefit of intervention strategies for chemoprevention 4. Scientific knowledge, critical thinking, and the practical application of diet in cancer prevention.

0101	Seong-Ho Lee	Seats (Total: 15)
	Tu 4:00pm - 6:45pm	ONLINE

NFSC678A **Selected Topics in Nutrition**

Credits: 1-4 Grading Method: Regular, Audit

Individual or group study in an area of nutrition.

Contact department for information to register for this course.

NFSC678F **Selected Topics in Nutrition; Current Topics in Nutrition and Chronic Disease**

Credits: 3 Grading Method: Regular, Audit

Individual or group study in an area of nutrition.

Prerequisite: NFSC100 or comparable course, or by permission of the instructor. Analysis of current topics related to diet, nutrition, and human health at cellular, molecular and biochemical level. Further, this course will provide overview of the current methods, and in vitro/vivo model systems used in research. Syllabus includes topics relevant to dietary regulation of genes/proteins and their impact on both physiological and pathological conditions including hyperlipidemia, hyperglycemia, and oncogenesis. This course is designed to help students to understand and apply current scientific concepts and research methods, and to obtain necessary skills in evaluation/interpretation of evidence based scientific data.

0101	Shaik Rahaman	Seats (Total: 20)
	M 2:15pm - 5:00pm	MMH 1304

NFSC678K **Selected Topics in Nutrition; The Gut Microbiota, Obesity and Obesity Comorbidities**

Credits: 3 Grading Method: Regular, Audit

Individual or group study in an area of nutrition.

0101	Diana Obanda	Seats (Total: 15)
	W 3:00pm - 5:45pm	MMH 1304

NFSC678R **Selected Topics in Nutrition; Advanced Human Nutrition**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Individual or group study in an area of nutrition.

Jointly offered with NFSC440. Prerequisites: NFSC100, BCHM462, BSCI440, and permission of department.

0101	David Lei	Seats (Total: 49)
	Class time/details on ELMs	ONLINE

NFSC678V **Selected Topics in Nutrition; Research Design and Methods in Health Promotion and Nutrition Education**

Credits: 3 Grading Method: Regular, Audit

Individual or group study in an area of nutrition.

Cross-listed with NFSC498V. Credit only granted for NFSC678V or NFSC498V. The major goals of this course are to help students understand fundamental behavioral, social models and theories used in the field of nutrition, and to address methodological issues in developing, implementing, and evaluating intervention programs, particularly in the context of nutrition education and behavior. The class topics include types of social and behavioral theories and models applied in the field of nutrition education and public health, conceptual framework building, methodological basics (conceptualizing and operationalizing measurements reliability and validity of scales, psychometric analysis including factor analysis, and issues in evaluating intervention programs.

0101	Hee-Jung Song	Seats (Total: 15)	
	F 2:00pm - 4:45pm	ONLINE	

NFSC679R **Selected Topics in Food Science; Food Safety and Nutrition Risk Assessment**

Credits: 4 Grading Method: Regular

Individual or group study in an area of food science.

0101	Abani Pradhan	Seats (Total: 15)	
	M 1:00pm - 2:40pm	ONLINE	
	F 11:00am - 1:30pm	ONLINE	Lab

NFSC679T **Selected Topics in Food Science; Advanced Food Processing and Safety**

Credits: 2 Grading Method: Regular

Individual or group study in an area of food science.

0101	Rohan Tikekar	Seats (Total: 10)
	Th 3:00pm - 5:30pm	ONLINE

NFSC688 **Seminar in Nutrition and Food Science**

Credits: 1-3 Grading Method: Regular, Audit

This is a seminar course presentedy by NFSC graduate students and invited speakers in the field of nutrition and food science.

0101	David Lei	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

NFSC690 **Nutrition and Aging**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: NFSC440 or BSCI440; or students who have taken courses with comparable content may contact the department.

Examine the physiological, social and psychological changes that may occur with aging and their impact on nutritional status and on successful aging.

0101	Nadine Sahyoun	Seats (Total: 10)
	Th 9:30am - 12:15pm	ONLINE

NFSC699 **Problems in Nutrition and Food Science**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Credit according to time scheduled and magnitude of problem. An experimental program on a topic other than the student's thesis problem will be conducted. Four credits shall be the maximum allowed toward an advanced degree.

Contact department for information to register for this course.

NFSC735 **Food Toxicology**

Credits: 3 Grading Method: Regular, Audit

Recommended: BCHM462, BSCI440, or CHEM131. Cross-listed with MIEH735. Credit only granted for: MIEH735 or NFSC735.

An introduction to basic concepts in toxicology in relation to toxic food contaminants and additives; both synthetic and naturally occurring. Focus on exposure routes, molecular targets and susceptible individuals. Also includes regulatory toxicology with respect food toxins.

0101	Paul Turner, Robert Buchanan	Seats (Total: 20)
	W 1:00pm - 3:45pm	ONLINE

NFSC799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

First and second semesters. Credit in proportion to work done and results accomplished. Investigation in some phases of foodservice administration which may form the basis of a thesis. results in the form of a thesis.

Contact department for information to register for this course.

NFSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

First and second semesters. Oral reports on special topics or recently published research in nutrition. Distinguished scientists are invited as guest lecturers. A maximum of three credits allowed for the M.S.

Contact department for information to register for this course.

NFSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

NIAS National Institute of Aeronautics - North Carolina — Fall 2020

NIAS788T **Advanced Topics; Heat Transfer Theory and Applications**

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

NIAS788W **Advanced Topics; Wing Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

TV01	Instructor: TBA	Seats (Total: 1)
	Contact instructor or department for details.	

PEER Health Center — Fall 2020

PEER311 **Peer Education Mental Health & Wellness**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DVCC

Prerequisite: Students must complete an interview before enrolling in this course. Restriction: Permission of instructor; and minimum cumulative GPA of 2.5. Credit only granted for: HLTH381 or PEER311. Formerly: HLTH 381. Additional information: Students are required to attend a 40-hour training the week before classes begin which will equip them with the information and tools necessary to provide outreach as early as the first week of the Fall classes. Some evening and weekend hours may be required.

Designed to train students to become Peer Educators who are responsible for presenting to members of the campus community about issues surrounding stress management, mental illness, appropriate on/off campus resources, stigma, body image, helping a friend in distress, and other issues related to mental health and wellness, including bystander intervention. Programming is done in classroom settings, residence halls, and at tables during special events.

0101	Jenna Messman, Olivia Mays	Seats (Total: 40)
	M 4:00pm - 5:00pm	ONLINE
	W 4:00pm - 6:00pm	ONLINE

PEER312 **Peer Education: Preventing Power-Based Violence**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DVCC

Prerequisite: Students must complete an interview before enrolling in this course. Restriction: Permission of instructor; and minimum cumulative GPA of 2.5. Credit only granted for: HLTH382 or PEER312. Formerly: HLTH382. Additional information: Students are required to attend a 40-hour training the week before classes begin which will equip them with the information and tools necessary to provide outreach as early as the first week of the Fall classes. Some evening and weekend hours may be required.

Designed to train students to become Peer Educators who are responsible for presenting to members of the campus community about the complex dynamics surrounding issues of power-based personal violence. This includes: sexual assault, relationship violence, stalking, bystander intervention, consent, and rape culture. Students fully learn the on and off-campus resources for victim/survivors. Programming is done in classroom settings, residence halls, Greek life spaces, and at tables during special events.

0101	Rajan Parikh, Laura Widener	Seats (Total: 15)
	M 4:00pm - 5:00pm	ONLINE
	W 4:00pm - 6:00pm	ONLINE

PEER318 **CARE Peer Advocacy**

(Perm req)

Credits: 3 Grading Method: Regular

Designed to train students to become Peer Advocates who are responsible for providing crisis and short-term support services for victims of sexual assault, relationship violence, stalking, sexual harassment and child abuse.Students will be meeting with clients and providing emotional support and resources (both on and off campus). During weekly classes, students will be trained in trauma-informed crisis intervention procedures that will not only help them assist clients during in- person sessions but will help them support clients via the crisis cell. Students will be expected to maintain the crisis cell (on a shared basis)throughout the semester as well as maintain 10 hours per week in the CARE office. In addition to maintaining the crisis cell and office hours, during the spring semester students will be tasked with working as a team in planning and executing a Take Back the Night event.

0101	Christina Jay W 4:30pm - 6:00pm Class time/details on ELMs	Seats (Total: 15) ONLINE ONLINE

PEER319 **CARE to Stop Violence Outreach Peer Program**

(Perm req)

Credits: 3 Grading Method: Regular

A two semester, 6-credit course designed to train students in the knowledge, values and skills to build professional relationships and become leaders in community development related to the social justice issue of sexual misconduct with emphasis on the college campus environment.

0101	Grace Boudreau MW 4:00pm - 4:50pm Class time/details on ELMs *Contact department or instructor for details.*	Seats (Total: 15) ONLINE ONLINE

PEER338 **PEER LEADERSHIP AND EDUCATION**

(Perm req)

Credits: 3 Grading Method: Regular

An interdisciplinary independent study designed to enhance the scope of learning around UHC peer education topics and train students to serve as leaders for those enrolled in first year peer courses, PEER31X and PEER32X. Second year peers are trained to facilitate intersectional and advanced health education dialogue, as well as serve in leadership roles for the course in which they were previously enrolled, PEER31X and PEER32X. Additionally, Peer Leader responsibilities include creating and implementing campus wide events to promote learning around the intersections between UHC peer education group topics (power-based violence, sexual health, alcohol and other drugs, stress and mental health). Peer Leaders will have different responsibilities based on the programmatic needs and goals of the semester.

0101	Madeleine Moore Tu 5:00pm - 6:30pm F 1:00pm - 2:00pm	Seats (Total: 10) ONLINE ONLINE
0201	Sarah Wilson M 5:15pm - 6:45pm F 1:00pm - 2:00pm	Seats (Total: 10) ONLINE ONLINE

PERS Persian Fall 2020

PERS101 **Elementary Persian I**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be native/fluent speaker of Persian.

Introduction to the alphabet, pronunciation patterns, greetings, basic structures, and other fundamentals, with emphasis on oral and aural skills.

0101	Bahareh Jalehmahmoudi	Seats (Total: 15)	
	MTuWF 10:00am - 10:50am	ONLINE	
	Th 10:00am - 10:50am	ONLINE	Lab

PERS201 Intermediate Persian I

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: PERS102; or Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be native/fluent speaker of Persian.

Development of speaking, reading, writing, listening and cultural knowledge through wide variety of activities.

0101	Manizhe Galledari	Seats (Total: 15)	
	MWThF 12:00pm - 12:50pm	ONLINE	
	Tu 12:00pm - 12:50pm	ONLINE	Lab

PERS283 Iranian Cinema

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Cross-listed with: FILM298B. Credit only granted for: PERS283 or FILM298B.

Introduction to Iranian cinema, society, and culture. Taught in English.

Cross-listed with FILM298B. Credit granted for PERS283, FILM283, or FILM298B.

0101	Matthew Miller	Seats (Total: 30)	
	MW 3:30pm - 4:45pm	ONLINE	

PERS298E Special Topics in Persian Studies; Visual Cultures of Islam

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topic to be announced when course is offered.

Crosslisted with ARTH389L, AAST298B, HIST219E, and RELS219E. Credit granted for HIST219E, ARTH389L, AAST298B, PERS298E, or RELS219E. Visual Cultures of Islam is part of the Digital Islamic Studies Curriculum (digitalislam.umich.edu). This course is taught by renowned University of Michigan instructor Christiane Gruber, an expert in the field of Islamic Art, and digitally shared with the University of Maryland. In this course, Professor Gruber explores definitions of "Islamic" art and investigates various visual cultures of Islam around the world from the 7th to the 20th century. The course meets twice a week in real time using video conferencing technology and students are able to enroll directly at Maryland for course credit.

0101	Instructor: TBA	Seats (Total: 12)
	TuTh 11:30am - 1:00pm	ONLINE

PERS298M **Special Topics in Persian Studies; Activist and Critical Art in Contemporary Iran**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topic to be announced when course is offered.

Cross-listed with ARTH389O. Credit only granted for PERS298M or ARTH389O. Exploration of Iranian visual and performing artists' intent and hope for change and their playful strategies for making a difference while using diverse and unique transgressive stories and styles to address themes of social justice and critical intervention. Aiming at bridging the readings with current events, class-time is used for lecture, open discussion, (virtual)role-playing, and creative responses. Taught in English.

0101	Marjan Moosavi	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ONLINE

PERS299 **Directed Study in Persian Language**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Directed study in Persian. Taught in Persian.

Contact department for information to register for this course.

PERS301 **Advanced Persian I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PERS202; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be native/fluent speaker of Persian.

Development of speaking, reading, writing, listening and cultural knowledge through wide variety of activities, especially reading.

0101	Nahal Akbari-Saneh	Seats (Total: 15)
	MWF 1:00pm - 1:50pm	ONLINE

PERS398A **Special Topics in Persian Studies; Theatre and Performance in Iran**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian.

Cross-listed with THET328W. Credit granted for PERS398A or THET328W. Multimedia survey of Iranian theatre and performance traditions from ancient Persia to contemporary Iran. Old performances (oral storytelling, shadow/puppet shows, comic and passion plays) and Western-style theatre and their mutual influence will be examined. Practical information abouthow to write about plays in their contexts, close readings, class discussions, watching performances, role-playing, and creative responseshelp develop analytical and critical skills. The ultimate aim is to examine Iranian theatre s potential in reflecting and changing theway Iranians think, ask questions, and play. Taught in English.

0101	Marjan Moosavi	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

PERS398C **Special Topics in Persian Studies; Islam: Learning, Piety, and Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian.

Cross-listed with HIST319L. Credit granted for PERS398C or HIST319L. History of the formation and development of major religious and intellectual currents of Islam.

0101	Ahmet Karamustafa	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

PERS398G **Special Topics in Persian Studies; Readings in Contemporary Iranian History**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian.

Blending content and advanced language acquisition, the course examines a range of issues related to the contemporary history of Iran, particularly leading to and after the Islamic Revolution.The primary focus is on developing Superior proficiency in the language and culture. Taught in Persian.

0101	Bahareh Jalehmahmoudi	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ONLINE

PERS398Q **Special Topics in Persian Studies; Social Issues in Contemporary Iran**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian.

Permission required. Taught in Persian. Blending content and advanced language acquisition, the course examines a range of issues of social significance in today's Iran from multiple perspectives. The primary focus is on developing Superior proficiency in the language and culture.

0101	Nahal Akbari-Saneh	Seats (Total: 10)
	F 9:00am - 11:45am	ONLINE

PERS398R **Special Topics in Persian Studies; Persian for Professional Purposes**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian.

Taught in Persian.

0101	Manizhe Galledari	Seats (Total: 10)
	TuTh 9:00am - 10:30am	ONLINE

PERS399 **Directed Study in Persian**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Directed study with faculty supervision.

Contact department for information to register for this course.

PERS399C **Directed Study in Persian; Living/Learning in Persian House**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Directed study with faculty supervision.

Prerequisite: Permission of departmetn. Taught in Persian.

0101	Manizhe Galledari	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

PERS399D **Directed Study in Persian; Capstone Research Project**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Directed study with faculty supervision.

Permission required. Taught in Persian.

0101	Manizhe Galledari	Seats (Total: 10)
	M 9:00am - 11:45am	ONLINE

PERS498N **Special Topics in Persian Studies; Masterpieces of Persian Literature Part 1**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topic and language to be announced when offered.

This course is designed to represent a holistic point of view of the vast world of Persian Literature Throughout the different literary genre. We will be focused on both Verse and Prose from the classical text starting from the 11th century and will proceed by a multitude of samples in Persian literature. Taught in Persian.

0101	Mohammad Bazargan	Seats (Total: 10)
	Tu 5:00pm - 7:30pm	Location: TBA
	Class time/details on ELMs	ONLINE

PERS498O **Special Topics in Persian Studies; Persian Literature in Modern Iran**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topic and language to be announced when offered.

0101	Mohammad Bazargan	Seats (Total: 10)
	W 9:00am - 11:45am	ONLINE

PERS689B **Special Topics in Persian Studies**

Credits: 3 Grading Method: Regular, Audit

In-depth analysis of a particular aspect of Persian studies. In Persian.

Contact department for information to register for this course.

PHIL Philosophy Fall 2020

Click here for fuller PHIL course descriptions.

PHIL100 **Introduction to Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU

An introduction to the literature, problems, and methods of philosophy either through a study of some of the main figures in philosophic thought or through an examination of some of the central and recurring problems of philosophy.

0101	Dan Moller Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Dan Moller Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Dan Moller Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0104	Dan Moller Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0105	Dan Moller Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0106	Dan Moller Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

FC01	Aida Roige Mas Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE	

PHIL140 **Contemporary Moral Issues**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

The uses of philosophical analysis in thinking clearly about such widely debated moral issues as abortion, euthanasia, homosexuality, pornography, reverse discrimination, the death penalty, business ethics, sexual equality, and economic justice.

0101	Andrew Fyfe Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	 Discussion
0102	Andrew Fyfe Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 26) ONLINE ONLINE	 Discussion
0103	Andrew Fyfe Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 26) ONLINE ONLINE	 Discussion
0201	Hallie Liberto Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0202	Hallie Liberto Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0203	Hallie Liberto Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0204	Hallie Liberto Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0205	Hallie Liberto Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0206	Hallie Liberto Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
FC01	Andrew Fyfe MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 30) BRB 1101	
FC02	Kalewold Kalewold Th 6:00pm - 7:15pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE ONLINE	Discussion
FC03	Jimmy Licon TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE	
FC04	Daniel Blair MW 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE	

PHIL170 **Introduction to Symbolic Logic**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: MS | General Education: FSAR

This course will introduce the basic concepts and techniques of modern symbolic logic, with an emphasis on developing skills in two areas: first, translating between ordinary language and logical notation; second, establishing the validity or invalidity of arguments using the methods of truth tables, deductions, and countermodels. Although the subject of symbolic logic was developed by mathematicians and philosophers for their own special purposes (which we will discuss), logical concepts and techniques have found applications in a variety of disciplines, including computer science, economics, law, linguistics, and psychology. We may also consider some of these applications.

0101	Paolo Santorio MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 25) ONLINE ONLINE	Discussion

0102	Paolo Santorio MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Paolo Santorio MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0104	Paolo Santorio MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0105	Paolo Santorio MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0106	Paolo Santorio MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

PHIL171 **Reasoning For Humans: Clear Thinking in an Uncertain World**

Credits: 3 Grading Method: Regular, Audit General Education: FSAR

Credit only granted for: PHIL171 or PHIL218A. Formerly: PHIL218A.

Reasoning is a transition in thought in which some beliefs or thoughts provide grounds or reasons for others. What makes certain transitions of thought rational or reasonable and others irrational or erratic is a major focus of investigation in diverse research areas, such as philosophy, logic, artificial intelligence, cognitive science, and psychology. This course is an introduction to logic and probability with a focus on applications to the study of the foundations of human reasoning.

0101	Eric Pacuit TuTh 12:30pm - 1:20pm F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Eric Pacuit TuTh 12:30pm - 1:20pm F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion

0103	Eric Pacuit TuTh 12:30pm - 1:20pm F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion

PHIL201 **Spooky Action at a Distance? Where Physics Meets Metaphysics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU, SCIS

Recommended: Students should be comfortable with moderately mathematical presentations. Placement into MATH110 or higher is strongly recommended. Credit only granted for: PHIL201 or PHIL209I. Formerly: PHIL209I.

Einstein believed that physics should represent a "reality in space and time, free from spooky action at a distance." He worried that quantum theory failed this test. Later developments suggest that quantum systems really can influence one another instantly, no matter how far apart they are, but the question remains controversial and experiments are not sufficient to provide an answer. This self-contained course will draw on philosophy and physics to investigate the controversy.

0101	Allen Stairs Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0102	Allen Stairs Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0103	Allen Stairs Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 26) ONLINE ONLINE	Discussion
FCW1	Allen Stairs Tu 3:00pm - 4:15pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 30) ONLINE ONLINE	Discussion

PHIL202 **Know Thyself: Wisdom Through Cognitive Science**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSHU, SCIS

Credit only granted for: PHIL209N or PHIL202. Formerly: PHIL209N.

How do we improve our decision making? Cognitive science demonstrates that self-knowledge isn't as easy as we think, and that there are numerous biases and fallacies that impact our decision-making in ways that are hard for us to be aware of. In this course you will learn what some of these are and how they have been discovered, and you will explore potential strategies for avoiding these fallacies and for making wiser choices.

0101	Peter Carruthers Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Peter Carruthers Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Peter Carruthers Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0104	Peter Carruthers Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0105	Peter Carruthers Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0106	Peter Carruthers Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

PHIL203 **The Rights and Wrongs of Killing People**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, SCIS

Credit only granted for: PHIL209J or PHIL203. Formerly: PHIL209J.

Virtually everyone thinks it's permissible to kill people only in special circumstances. But why is killing usually wrong? Is it ever acceptable to kill an innocent human being intentionally? This course raises these and related questions and examines cases such as terrorism, suicide, abortion, euthanasia, the death penalty, war. Except for a brief discussion of animals, all the controversies considered deal with killing and causing death to human beings.

0101	Sungwon Woo Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0102	Sungwon Woo Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0103	Sungwon Woo Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 26) ONLINE ONLINE	Discussion
0104	Sungwon Woo Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0105	Sungwon Woo Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 26) ONLINE ONLINE	Discussion
0106	Sungwon Woo Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 26) ONLINE ONLINE	Discussion

PHIL205 **Are Sports Ethical?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, SCIS

Credit only granted for: PHIL205, PHIL209G, or HONR229E. Formerly: HONR229E.

Things happen routinely in sports that would seem morally unacceptable in other context: violence between the participants, attempts to trick the referee, fans hoping that some players would do embarrassingly badly, spectators feeling anger towards whole nations. Nonetheless, all of this may seem reasonable and even justifiable within a sporting context. This course will investigate the ethical structure of sports, and what it tells us about the ethics of everyday life. Philosophy will provide the primary disciplinary context, but we will also think about sociological, legal and anthropological perspectives on sports. Issues will include the nature of sportsmanship, what types of violence in sports are acceptable, drug use in sports, what it means to be a fan (for example, asking why loyalty to your team is valuable) and how our view of sports interacts with our view of nations. By the end of the course you should have gained familiarity with a variety of ethical concepts and a sensitivity to the ethical issues in sports. You should also find that by thinking about morality in the context of sports, you will look at larger ethical issues in new ways.

0101	Harjit Bhogal Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Harjit Bhogal Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Harjit Bhogal Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

PHIL220 **Bioethics: Regulating Right and Wrong**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DSSP

Credit only granted for: PHIL209A or PHIL220. Formerly: PHIL209A.

Bioethicists formulate ethical guidelines. They answer questions such as: When life-saving health resources are scarce, who should get them? Should we increase supply of one such resource, kidneys, by buying them from living "donors"? If drug trials in developing countries benefit patients who consent to participate, are the trials ethical, even if the same research would be forbidden in the US? If a sick person aims to hasten her death, how, if at all, might her doctor permissibly help her? In this course, students construct and defend ethical rules in four domains: research ethics, allocation of scarce resources, markets in organs, and physician-assisted dying.

0101	Samuel Kerstein Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Samuel Kerstein Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Samuel Kerstein Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

PHIL245 **Political and Social Philosophy I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

A critical examination of such classical political theories as those of Plato, Hobbes, Locke, Rousseau, Mill, Marx, and such contemporary theories as those of Hayek, Rawls, and recent Marxist thinkers.

0101	Brian Kogelmann Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Brian Kogelmann Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Brian Kogelmann Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

PHIL269M **Special Topics in Study Abroad II; Moral Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PHIL269Y **Special Topics in Study Abroad II; Truth & Reality**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PHIL271 **Symbolic Logic**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Recommended: PHIL170.

This course provides students with a thorough treatment of the basic concepts and techniques of modern symbolic logic, through classical first-order logic with identity. We will concentrate on the construction of natural deduction proofs and on the evaluation of logical statements in semantic models. Along the way, we will study some of the concepts from set theory (sets, functions, relations) used in the definition of semantic models for logical systems. We may also introduce some alternative, or non-classical logics. Although the subject of symbolic logic was developed by mathematicians and philosophers for their own special purposes (which we will discuss), logical concepts and techniques have found applications in a variety of disciplines, including computer science, economics, law, linguistics, and psychology. We may also consider some of these applications.

In addition to face-to-face class meetings, recorded versions of the lectures for the course will be available online.

0101	Casey Enos	Seats (Total: 25)
	MW 4:00pm - 5:15pm	ONLINE

PHIL308T **Studies in Contemporary Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Problems, issues, and points of view of current interest in philosophy.

0101	Daniel Blair	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

PHIL308W **Studies in Contemporary Philosophy; World Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Problems, issues, and points of view of current interest in philosophy.

Cross-listed with RELS319W. Credit granted for PHIL308W or RELS319W.

0101	James Maffie	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

PHIL308X **Studies in Contemporary Philosophy; Philosophy and Time Travel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Problems, issues, and points of view of current interest in philosophy.

Examines the philosophical issues surrounding the paradoxes of time travel. Several solutions are considered, ranging from classical consistency conditions to multiverse theories. Materials include works of philosophy and physics, and time travel narratives from science fiction short stories and movies.

ESG1	Lucas Dunlap	Seats (Total: 40)	
	Class time/details on ELMs	ONLINE	
	Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci-reg@umd.edu for permission.		

PHIL309B **Philosophical Problems; (Anti-) Realism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A focused study of a contemporary philosophical problem or issue. Topics will vary, but the course will encourage students to to generate critical analyses or proposed resolutions of issues in the contemporary philosophical literature.

0101	Georges Rey	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	

PHIL310 **Ancient Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed 6 credits in philosophy or classics.

A study of the origins and development of philosophy and science in ancient Greece, focusing on the pre-Socratics, Socrates, Plato, and Aristotle.

0101	Rachel Singpurwalla	Seats (Total: 25)	
	Class time/details on ELMs F 10:00am - 10:50am	ONLINE ONLINE	Discussion
0102	Rachel Singpurwalla	Seats (Total: 25)	
	Class time/details on ELMs F 12:00pm - 12:50pm	ONLINE ONLINE	Discussion
0103	Rachel Singpurwalla	Seats (Total: 25)	
	Class time/details on ELMs F 1:00pm - 1:50pm	ONLINE ONLINE	Discussion

PHIL318G **Studies in Epistemology/Metaphysics; The Philosophy in AI**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Problems, issues, and points of view in epistemology or metaphysics.

0101	Fabrizio Cariani	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

PHIL332 **Philosophy of Beauty**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 3 courses in PHIL; or permission of ARHU-Philosophy department.

Philosophical theories, historical and contemporary, of beauty, sublimity, and other aesthetic qualities, of aesthetic experience, and of aesthetic judgment.

0101	John Brown	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

PHIL338D **Studies in Value Theory; The Ethics of Sex**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Problems, issues and points of view in ethics, aesthetics, political philosophy and related areas.

Credit only granted for PHIL338D or (PHIL309S in Summer 2016). Questions of sexual morality often deal with emotionally-fraught decisions and real-world problems. This course will appeal to ethical theory to help us think carefully about the issues. We will also use films to provide a common ground for discussions. Topics include monogamy, cheating, open relationships, consent, sex & love, BDSM, pornography, prostitution, bestiality, and pedophilia.

0101	Hallie Liberto	Seats (Total: 30)
	MW 3:00pm - 4:15pm	ONLINE

PHIL338J **Studies in Value Theory; Supreme Law: The Constitution, Morality and the Courts**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Problems, issues and points of view in ethics, aesthetics, political philosophy and related areas.

0101	Susan Dwyer	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	ONLINE	

PHIL341 **Ethical Theory**

Credits: 3 Grading Method: Regular

Prerequisite: 6 credits in PHIL courses.

A critical examination of classical and contemporary systems of ethics, such as those of Aristotle, Kant, Mill, and Rawls.

Prerequisite: 6 credit hours in philosophy.

0101	Adam Jurkiewicz	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	

PHIL344 **Philosophy of Race**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVUP

Credit only granted for: PHIL344 or PHIL308Y. Formerly: PHIL308Y.

A survey of philosophical arguments involving race and racism. Guiding questions will include: How have philosophers and scientists conceived of the concept of race? Is race a coherent concept? Does it help us explain differences in performance and behavior? What makes racism, racial prejudice, and discrimination wrong? What is the point of equality? Do we owe reparations to victims of racism?

0101	Sungwon Woo	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

PHIL362 **Theory of Knowledge**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in PHIL courses; and PHIL170. Formerly: PHIL462.

Some central topics in the theory of knowledge, such as perception, memory, knowledge, and belief, skepticism, other minds, truth, and the problems of induction.

0101	Charles Barclay	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	

PHIL386 **Experiential Learning**

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-Philosophy department; and junior standing or higher.

Consult Director of Undergraduate Studies: C. Manekin. Prerequisites: 12 credit hours of philosophy and 3.0 GPA. Carries no credit toward philosophy major.

Contact department for information to register for this course.

PHIL412 **The Philosophy of Plato**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in PHIL courses.

A critical study of selected dialogues.

0101	Michael McCourt	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

PHIL417 **The Golden Age of Jewish Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Prerequisite: 3 credits in PHIL courses; or permission of ARHU-Meyerhoff Program & Center for Jewish Studies; or permission of ARHU-Philosophy department. Cross-listed with JWST452. Credit only granted for: JWST452 or PHIL417.

Jewish philosophy from Maimonides in the 12th century to the expulsion of the Jews from Spain at the end of the 15th century. Topics include the limitations of human knowledge, creation of the world, foreknowledge and free will, and the existence of God.

0101	Charles Manekin	Seats (Total: 30)	
	M 2:00pm - 3:15pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

PHIL418F **Topics in Epistemology/Metaphysics; Things we do with words: Statements, Lies, Innuendo**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive examination of contemporary problems and issues in epistemology or metaphysics. Source material will be selected from recent books and articles.

An advanced course in the philosophy of language, focused on pragmatic theory. Topics include speech acts, interpretation of metaphors and related phenomena, and the use of swear-words and slurs.

0101	Michael McCourt	Seats (Total: 25)	
	MW 4:00pm - 5:15pm	ONLINE	

PHIL418L **Topics in Epistemology/Metaphysics; Innate Knowledge**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive examination of contemporary problems and issues in epistemology or metaphysics. Source material will be selected from recent books and articles.

Examines ideas about what we can perceive, conceptualize, or know, just in virtue of our nature, concerning mathematics, physics, language, or m orality, among other areas. Readings include Plato, Descartes, Locke, Le ibniz, Kant, Chomsky, and several contemporary authors.

0101	Alexander Williams	Seats (Total: 25)	
	TuTh 9:30am - 10:45am	ONLINE	

PHIL428B **Classical Arabic Philosophy by Muslims and Jews**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Cross-listed with: JWST429B. Credit only granted for: PHIL428B or JWST429B.

An introduction to classical Arabic philosophy from the ninth to the thirteenth centuries of the Christian era. But unlike most courses on this topic, we shall not be reading philosophy solely by Muslims but also by Jews (and maybe Christians). In a sense, the course is best described by the title of the book by Dimitri Gutas, "Greek Thought, Arabic Culture".

Cross-listed with JWST429B. Credit only granted for PHIL428B or JWST429B.

0101	Charles Manekin	Seats (Total: 30)	
	M 3:30pm - 4:45pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

PHIL445 **Contemporary Political Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must have completed 3 credits in philosophy or political theory; or permission of ARHU-Philosophy department. And sophomore standing or higher.

Major trends in contemporary political philosophy: liberal, libertarian, communitarian, socialist, feminist.

0101	Brian Kogelmann	Seats (Total: 25)	
	MW 12:00pm - 12:50pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

PHIL453 **Philosophy of Science II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Students must have completed a minium of two philosophy courses.

A comprehensive survey of developments in the main problems of the philosophy of science from logical positivism to the present. The nature of theories, models, laws, and counterfactuals, testing, inductive logic, and confirmation theory, experimental methodology, measurement, explanation, concept formation, growth of scientific knowledge, and scientific realism.

0101	Harjit Bhogal	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

PHIL469Y **Study Abroad Special Topics IV; Philosophy of Science II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PHIL498F **Topical Investigations; Topical Investigation**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite:Two courses in philosophy or permission of the department.

Contact department for information to register for this course.

PHIL498G **Topical Investigations; Topical Investigation**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite:Two courses in philosophy or permission of the department.

Contact department for information to register for this course.

PHIL660 **Metaphysics, Mind, and Language**

Credits: 3 Grading Method: Regular, Audit

A basic course on selected issues in metaphysics, philosophy of mind, and philosophy of language for beginning graduate students, covering a number of topics in depth, to provide a springboard for further study and research in the area.

0101	Paolo Santorio	Seats (Total: 15)
	W 2:00pm - 4:30pm	ONLINE

PHIL688T **Selected Problems in Philosophy; Introduction to Semantics**

Credits: 3 Grading Method: Regular, Audit

Cross-listed with LING660. Credit granted for LING660 or PHIL688T.

0101	Alexander Williams	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	MMH 1108B
	Class time/details on ELMs	ONLINE

PHIL788G **Research in Philosophy; Research in Philosophy**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Contact department for information to register for this course.

PHIL788I **Research in Philosophy; Research in Philosophy**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Contact department for information to register for this course.

PHIL799 **Master's Thesis Research; Masters Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

PHIL808G **Seminar in the Problems of Philosophy**

Credits: 3 Grading Method: Regular, Audit

0101	Dan Moller Tu 2:00pm - 4:30pm	Seats (Total: 15) ONLINE

PHIL808K **Seminar in the Problems of Philosophy; The Modal Future**

Credits: 3 Grading Method: Regular, Audit

0101	Fabrizio Cariani M 2:00pm - 4:30pm	Seats (Total: 15) ONLINE

PHIL848G **Seminar in Ethics; Trust, Personal and Political**

Credits: 3 Grading Method: Regular, Audit

This course is open to philosophy graduate students and selected undergraduates by permission of the instructor. It will be conducted online via Zoom, with students leading the discussion once the course is underway. Trust is an element of emotional life that has been discussed by contemporary philosophers as well as political scientists for its relevance to social and political life. But is it a belief or an emotion- or the absence of certain emotions, most notably suspicion? And what does it involve besides reliance on someone else? We'll read essays by Annette Baier, Karen Jones, Philip Pettit, and Pamela Hieronymi, along with others represented in a recent anthology: Paul Faulkner and Thomas Simpson (ed s.), The Philosophy of Trust.

0101	Patricia Greenspan Th 3:30pm - 6:00pm	Seats (Total: 15) ONLINE

PHIL888 **Professional Mentoring for Doctoral Students**

Credits: 1-3 Grading Method: Sat-Fail

Work with a faculty advisor on various aspects of professional development.

Contact department for information to register for this course.

PHIL889 **Pedagogical Mentoring for Doctoral Students**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Work with a faculty advisor to develop and improve pedagogical skills.

Contact department for information to register for this course.

PHIL898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PHIL899 **Doctoral Dissertation Research; Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

PHPE Philosophy, Politics, and Economics — Fall 2020

PHPE400 **Individual and Group Decision-Making**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Foundational issues that arise within the theories of rational choice that underlie the treatments of decision-making found in economics, politics, and the other social sciences. The course is focused on individual decisions (rational choice theory), strategic decisions (game theory) and group decisions (social choice theory). In addition to presenting the formal models of decision making, we also discuss to what extent these mathematical theories explain social interactions. An important aspect of the course is to introduce students to the ways in which economic analysis has been applied to issues in social and political philosophy. Readings will be drawn from the literature in economics, psychology, statistics and political science, as well as philosophy.

Credit granted for PHPE400 or GVPT449D.

0101	Eric Pacuit	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

PHSC Public Health Science — Fall 2020

PHSC321 **Transfer Success for the Public Health Science Major**

Credits: 3 Grading Method: Regular

Restriction: Must be a first year transfer student in UMD's Public Health Science program at Shady Grove.

A public health-focused transition course for first year transfer students in UMD's PHSC program at Shady Grove. Students will engage with current public health topics through primary sources, literature reviews, course discussions, analytic writing, and critical thinking. Academic success and professional development in the public health field will be emphasized. Students will also engage with faculty, staff, centers, and resources both at the University of Maryland, College Park and the Universities at Shady Grove.

ESG1	Kristen Cabrera, Jennifer Hodgson Tu 10:00am - 12:30pm	Seats (Total: 35) ONLINE
	Restricted to Shady Grove students in the Public Health Science major.	

PHSC389 **Independent Research Study in Public Health Science**

(Perm req)

Credits: 1-6 Grading Method: Regular

This independent research-based experience will provide the opportunity for students to work with individual research mentors in the area of Public Health Science. Students must identify a mentor prior to obtaining departmental permission.

0101	Nancy Smith Contact instructor or department for details.	Seats (Total: 30)
ESG1	Nancy Smith Contact instructor or department for details. *Restricted to Shady Grove students in the Public Health Sciences major.*	Seats (Total: 20)

PHSC399 **Public Health Science Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular

The Public Health Science internship will enable students to gain practical experience under conditions conducive to academic, research and professional development. The internship is a time-limited, supervised period of public health professional experience carried out in a related professional organization or research setting.

0101	Nancy Smith Contact instructor or department for details.	Seats (Total: 30)
ESG1	Nancy Smith Contact instructor or department for details. *Restricted to Shady Grove students in the Public Health Sciences major.*	Seats (Total: 20)

PHSC401 **History of Public Health**

Credits: 3 Grading Method: Regular

Restriction: Must be in Public Health Science program; and must have earned a minimum of 45 credits. Credit only granted for: PHSC401 or SPHL401. Formerly: SPHL401.

Emphasis is on the history of public health in the Western world from antiquity to the present. Also examines the influence of public health developments as they relate to the Western world as well as throughout diverse cultures and societies across the globe. Analysis focuses on the interaction among Western and non-Western cultures with respect to health issues, including science, policies, prevention and treatment.

0101	Marian Jones	Seats (Total: 35)	
	Class time/details on ELMs	ONLINE	

PHSC412 **Food, Policy, and Public Health**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed HLSA300 with a C- or higher. Recommended: NFSC100. Restriction: Must be in Public Health Science program; and junior standing or higher. Credit only granted for: PHSC412 or SPHL412. Formerly: SPHL412.

Broad overview of the impact of food and food policy on public health. Course covers topics such as access to food, food systems, influence of food policies on the individual, the cost of food, influences on food selection, food safety risks and responses, nutrition-related health challenges, and a comparison of US food/nutrition issues with those of other nations.

0101	Christopher Waldrop	Seats (Total: 35)	
	W 5:00pm - 7:30pm	ONLINE	
	Restricted to College Park students in the Public Health Science major.		

PHSC415 **Essentials of Public Health Biology: The Cell, The Individual, and Disease**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI202. Recommended: BSCI223. Restriction: Must be in Public Health Science program; and junior standing or higher. Credit only granted for: PHSC415, SPHL415 or SPHL498J. Formerly: SPHL415 and SPHL498J.

Presents the basic scientific and biomedical concepts of modern public health problems and explores in depth mechanisms and models of the major categories of disease. The biologic principles presented are foundations to public health disease prevention, control, or management programs.

0102	Jessica O'Hara	Seats (Total: 22)	
	MW 1:00pm - 1:50pm	ONLINE	
	W 3:00pm - 3:50pm	ONLINE	Discussion
0103	Jessica O'Hara	Seats (Total: 22)	
	MW 1:00pm - 1:50pm	ONLINE	
	W 4:00pm - 4:50pm	ONLINE	Discussion

0104	Jessica O'Hara MW 1:00pm - 1:50pm Th 9:30am - 10:20am	Seats (Total: 22) ONLINE ONLINE	 Discussion
0105	Jessica O'Hara MW 1:00pm - 1:50pm Th 11:00am - 11:50am	Seats (Total: 22) ONLINE ONLINE	 Discussion
0106	Jessica O'Hara MW 1:00pm - 1:50pm Th 12:30pm - 1:20pm	Seats (Total: 22) ONLINE ONLINE	 Discussion
0107	Jessica O'Hara MW 1:00pm - 1:50pm Th 2:00pm - 2:50pm	Seats (Total: 22) ONLINE ONLINE	 Discussion
0108	Jessica O'Hara MW 1:00pm - 1:50pm Th 3:30pm - 4:20pm	Seats (Total: 22) ONLINE ONLINE	 Discussion
ESG1	Jessica O'Hara MW 1:00pm - 1:50pm W 2:00pm - 2:50pm *Restricted to Shady Grove students in the Public Health Science major.*	Seats (Total: 35) ONLINE ONLINE	 Discussion

PHSC440 **Public Health Nutrition**

Credits: 3 Grading Method: Regular

Prerequisite: A minimum of C- in BSCI170, BSCI171, CHEM131, CHEM132 and EPIB301. Restriction: Must be in Public Health Science program. Credit only granted for: PHSC440 or NFSC498L.

Engages students in conceptual thinking about the relationship between public health and nutritional health. Students will analyze and interpret "A Framework for Public Health Nutrition." Students will identify determinants of nutritional health, assess nutritional health in individuals and populations, develop strategies to mitigate these issues, and analyze and evaluate public health nutrition policies.

0101	Kendall Bustad Class time/details on ELMs	Seats (Total: 10) ONLINE	
0201	Kendall Bustad Class time/details on ELMs	Seats (Total: 40) ONLINE	

ESG1	Kendall Bustad Class time/details on ELMs	Seats (Total: 25) ONLINE
	Restricted to Shady Grove students in the Public Health Science major.	

PHSC497 **Public Health Science Capstone**

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: Must have completed the professional writing requirement with a C- or higher; and minimum grade of C- in MIEH400. Restriction: Must have earned a minimum of 100 credits; and must be in Public Health Science program; and must be in the final semester of undergraduate study. Credit only granted for: SPHL498F or PHSC497. Formerly: SPHL498F.

The capstone course is the culminating experience for Public Health Science students and must be taken only in the final semester of study. The Public Health Science capstone course is designed to challenge students to integrate the five core areas of public health in investigating, researching and addressing public health issues. Throughout the semester, students will be required to evaluate, analyze and synthesize scholarly works as they research and propose solutions to a variety of public health issues. By the conclusion of this research based course, students will understand how the various public health perspectives can combine in addressing and informing public health practices.

While this course is listed as "Blended Learning," there is no requirement to be physically present for the in-person activities; instructors are prepared to accommodate all students through virtual learning options.

0101	Elizabeth Bell M 4:00pm - 6:30pm Class time/details on ELMs	Seats (Total: 20) SPH 0116B ONLINE
0301	Nancy Smith Tu 4:00pm - 6:30pm Class time/details on ELMs	Seats (Total: 20) SPH 0116B ONLINE
0501	Kevin Glasz W 6:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 20) SPH 0116B ONLINE
0701	Chandria Jones Th 5:00pm - 7:30pm Class time/details on ELMs	Seats (Total: 20) SPH 0116B ONLINE
ESG1	Alyssa Brooks Tu 5:00pm - 7:30pm	Seats (Total: 20) ONLINE
	Restricted to Shady Grove students in the Public Health Science major.	

PHYS Physics Fall 2020

PHYS102 **Physics of Music**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with PHYS103)

Prerequisite: Must have math eligibility of MATH107 or higher. Credit only granted for: PHYS102 and PHYS499C. Additional information: CORE Distributive Studies Physical Sciences Laboratory Course only when taken concurrently with PHYS103.

A study of the physical basis of sound, acoustical properties of sound, the human ear and voice, reproduction of sound, electronic music, acoustical properties of auditoriums, and other selected topics.

0101	Matt Severson TuTh 9:30am - 10:45am	Seats (Total: 150) ONLINE	

PHYS103 **Physics of Music Laboratory**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Optional laboratory to accompany PHYS 102. Laboratory experiments, including the velocity of sound, sound quality and wave shape, traveling and standing waves, fourier synthesis and analysis, musical synthesizer, psychoacoustics, and audio equipment.

0101	Andris Skuja Th 11:00am - 12:50pm	Seats (Total: 24) ONLINE	Lab
0301	Andris Skuja Th 3:30pm - 5:20pm	Seats (Total: 24) ONLINE	Lab
0401	Andris Skuja F 10:00am - 11:50am *Recommended for First-Year students.*	Seats (Total: 24) ONLINE	Lab
0501	Andris Skuja F 12:00pm - 1:50pm	Seats (Total: 24) ONLINE	Lab
0701	Andris Skuja W 3:00pm - 5:00pm	Seats (Total: 24) ONLINE	Lab
0801	Andris Skuja W 1:00pm - 2:50pm	Seats (Total: 24) ONLINE	Lab

PHYS105 **A Global Challenge: Energy and Climate Change**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS, SCIS

This marquee course will consider the global energy crisis from a scientific perspective. Topics include basic laws of energy and thermodynamics, their effects on energy production and distribution, greenhouse gas, global warming and policy options for decision makers. This course is aimed at the non-science major.

0102	Jordan Goodman TuTh 12:30pm - 1:45pm M 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0104	Jordan Goodman TuTh 12:30pm - 1:45pm F 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

PHYS111 **Physics in the Modern World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS

A survey course in general physics emphasizing the role that physics plays in science, technology, and society today. The course is concept oriented and minimal use of mathematics is made. Intended for the general student; does not satisfy the requirements of the professional schools.

Contact department for information to register for this course.

PHYS115 **Inquiry into Physics**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL | General Education: DSNL

Recommended: High School Physics. Restriction: Must not have completed PHYS117; and must be in one of the following programs (Elementary Education; Early Childhood Education; Middle School Education). Credit only granted for: PHYS115 or PHYS117.

Intended for students majoring in neither the physical nor the biological sciences. Use of laboratory-based and inquiry-based methods to study some of the basic ideas of physical sciences.

0101	Shabnam Jabeen MWF 1:00pm - 2:50pm	Seats (Total: 20) ONLINE	 Lab
0201	Arpita Upadhyaya MWF 9:00am - 10:50am	Seats (Total: 20) ONLINE	 Lab

PHYS121 **Fundamentals of Physics I**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL | General Education: DSNL

Prerequisite: MATH112 or MATH115. Credit only granted for: PHYS121, PHYS131, or PHYS331.

The first part of a two-semester course in general physics treating the fields of mechanics, heat, sound, electricity, magnetism, optics, and modern physics. Together with PHYS122, this generally satisfies the minimum requirement of medical and dental schools.

Physics clinic, PHY 1214, MTWHF 11,1. If purchasing used books additional software may be required. Students must pay a $50.00 laboratory materials fee.

0201	Ki-Yong Kim	Seats (Total: 28)	
	MWF 12:00pm - 12:50pm	ONLINE	
	M 10:00am - 11:50am	ONLINE	Lab
	M 9:00am - 9:50am	ONLINE	Discussion
0202	Ki-Yong Kim	Seats (Total: 28)	
	MWF 12:00pm - 12:50pm	ONLINE	
	M 2:00pm - 3:50pm	ONLINE	Lab
	M 1:00pm - 1:50pm	ONLINE	Discussion
0203	Ki-Yong Kim	Seats (Total: 28)	
	MWF 12:00pm - 12:50pm	ONLINE	
	Tu 9:00am - 10:50am	ONLINE	Lab
	Tu 8:00am - 8:50am	ONLINE	Discussion
0204	Ki-Yong Kim	Seats (Total: 28)	
	MWF 12:00pm - 12:50pm	ONLINE	
	Tu 3:00pm - 4:50pm	ONLINE	Lab
	Tu 2:00pm - 2:50pm	ONLINE	Discussion
0205	Ki-Yong Kim	Seats (Total: 28)	
	MWF 12:00pm - 12:50pm	ONLINE	
	W 5:00pm - 6:50pm	ONLINE	Lab
	W 4:00pm - 4:50pm	ONLINE	Discussion
0206	Ki-Yong Kim	Seats (Total: 28)	
	MWF 12:00pm - 12:50pm	ONLINE	
	W 3:00pm - 4:50pm	ONLINE	Lab
	W 2:00pm - 2:50pm	ONLINE	Discussion

0401	Negar Heidarian Boroujeni	Seats (Total: 28)	
	Tu 7:00pm - 8:50pm	ONLINE	
	Th 6:30pm - 7:20pm	ONLINE	
	M 8:00pm - 9:50pm	ONLINE	Lab
	W 6:30pm - 7:20pm	ONLINE	Discussion
0402	Negar Heidarian Boroujeni	Seats (Total: 28)	
	Tu 7:00pm - 8:50pm	ONLINE	
	Th 6:30pm - 7:20pm	ONLINE	
	W 7:30pm - 9:20pm	ONLINE	Lab
	M 6:30pm - 7:20pm	ONLINE	Discussion
0403	Negar Heidarian Boroujeni	Seats (Total: 28)	
	Tu 7:00pm - 8:50pm	ONLINE	
	Th 6:30pm - 7:20pm	ONLINE	
	Tu 5:00pm - 6:50pm	ONLINE	Lab
	Th 7:30pm - 8:20pm	ONLINE	Discussion
0405	Negar Heidarian Boroujeni	Seats (Total: 28)	
	Tu 7:00pm - 8:50pm	ONLINE	
	Th 6:30pm - 7:20pm	ONLINE	
	Th 7:30pm - 9:20pm	ONLINE	Lab
	Tu 6:00pm - 6:50pm	ONLINE	Discussion
PDS1	Negar Heidarian Boroujeni	Seats (Total: 28)	
	Tu 7:00pm - 8:50pm	ONLINE	
	Th 6:30pm - 7:20pm	ONLINE	
	Th 7:30pm - 9:20pm	ONLINE	Lab
	Tu 6:00pm - 6:50pm	ONLINE	Discussion
	Restricted to students in the SIE Program. Click here for more information.		

PHYS122 **Fundamentals of Physics II**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL | General Education: DSNL

Prerequisite: PHYS121; or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS122, PHYS132, or PHYS332.

A continuation of PHYS121, which together with it, generally satisfies the minimum requirement of medical and dental schools.

Physics clinic, PHY 1214, MTWHF 12,2. If purchasing used books additional software may be required. Students must pay a $50.00 laboratory materials fee.

0101	Negar Heidarian Boroujeni	Seats (Total: 24)	
	MWF 1:00pm - 1:50pm	ONLINE	
	M 4:00pm - 5:50pm	ONLINE	Lab
	M 3:00pm - 3:50pm	ONLINE	Discussion
0102	Negar Heidarian Boroujeni	Seats (Total: 24)	
	MWF 1:00pm - 1:50pm	ONLINE	
	Tu 10:00am - 11:50am	ONLINE	Lab
	Tu 9:00am - 9:50am	ONLINE	Discussion
0105	Negar Heidarian Boroujeni	Seats (Total: 24)	
	MWF 1:00pm - 1:50pm	ONLINE	
	Tu 4:00pm - 5:50pm	ONLINE	Lab
	Th 4:00pm - 4:50pm	ONLINE	Discussion
0401	Negar Heidarian Boroujeni	Seats (Total: 18)	
	MW 6:00pm - 7:15pm	ONLINE	
	M 7:30pm - 9:20pm	ONLINE	Lab
	W 7:30pm - 8:20pm	ONLINE	Discussion
0402	Negar Heidarian Boroujeni	Seats (Total: 24)	
	MW 6:00pm - 7:15pm	ONLINE	
	W 7:30pm - 9:20pm	ONLINE	Lab
	M 7:30pm - 8:20pm	ONLINE	Discussion
PDS1	Negar Heidarian Boroujeni	Seats (Total: 6)	
	MW 6:00pm - 7:15pm	ONLINE	
	M 7:30pm - 9:20pm	ONLINE	Lab
	W 7:30pm - 8:20pm	ONLINE	Discussion
	Restricted to students in the SIE Program. Click here for more information.		

PHYS131 **Fundamentals of Physics for Life Sciences I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131; and (MATH136 or MATH140); and (BSCI160 and BSCI161; or BSCI106); and (BSCI170 and BSCI171; or BSCI105). Credit only granted for: PHYS121, PHYS131, or PHYS331.

The first part of a two-semester course in general physics specifically oriented towards applications relevant for students in biology and pre-medical programs. The course covers basic mechanics including forces and energy, properties of matter, and thermodynamics done in authentic biological contexts.

Students must pay a $50.00 laboratory materials fee.

0101	Matt Severson	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ONLINE	
	W 5:00pm - 6:50pm	ONLINE	Lab
	W 4:00pm - 4:50pm	ONLINE	Discussion
0102	Matt Severson	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ONLINE	
	M 4:00pm - 5:50pm	ONLINE	Lab
	M 3:00pm - 3:50pm	ONLINE	Discussion
0103	Matt Severson	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ONLINE	
	Tu 10:00am - 11:50am	ONLINE	Lab
	Tu 9:00am - 9:50am	ONLINE	Discussion
0104	Matt Severson	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ONLINE	
	W 1:00pm - 2:50pm	ONLINE	Lab
	W 12:00pm - 12:50pm	ONLINE	Discussion
0105	Matt Severson	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ONLINE	
	Tu 12:00pm - 1:50pm	ONLINE	Lab
	Tu 11:00am - 11:50am	ONLINE	Discussion
0107	Matt Severson	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ONLINE	
	M 7:00pm - 8:50pm	ONLINE	Lab
	M 6:00pm - 6:50pm	ONLINE	Discussion
0108	Matt Severson	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ONLINE	
	Th 7:00pm - 8:50pm	ONLINE	Lab
	Th 6:00pm - 6:50pm	ONLINE	Discussion
0201	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	M 12:00pm - 1:50pm	ONLINE	Lab
	M 11:00am - 11:50am	ONLINE	Discussion

0202	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	Tu 5:00pm - 6:50pm	ONLINE	Lab
	Tu 4:00pm - 4:50pm	ONLINE	Discussion
0203	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	Th 10:00am - 11:50am	ONLINE	Lab
	Th 9:00am - 9:50am	ONLINE	Discussion
0204	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	Th 5:00pm - 6:50pm	ONLINE	Lab
	Th 4:00pm - 4:50pm	ONLINE	Discussion
0205	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	W 10:00am - 11:50am	ONLINE	Lab
	W 9:00am - 9:50am	ONLINE	Discussion
0206	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	Tu 7:00pm - 8:50pm	ONLINE	Lab
	Tu 6:00pm - 6:50pm	ONLINE	Discussion
0208	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	W 7:00pm - 8:50pm	ONLINE	Lab
	W 6:00pm - 6:50pm	ONLINE	Discussion

PHYS132 **Fundamentals of Physics for Life Sciences II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS131; or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS122, PHYS132, or PHYS332.

The second part of a two-semester course in general physics specifically oriented towards applications relevant for students in biology and pre-medical programs. The course covers basic statistical physics, electricity and magnetism, and optics done in authentic biological contexts.

Students must pay a $50.00 laboratory materials fee.

0101	David Buehrle	Seats (Total: 24)	
	MWF 12:00pm - 12:50pm	ONLINE	
	Tu 1:00pm - 2:50pm	ONLINE	Lab
	Tu 12:00pm - 12:50pm	ONLINE	Discussion
0102	David Buehrle	Seats (Total: 24)	
	MWF 12:00pm - 12:50pm	ONLINE	
	Th 4:00pm - 5:50pm	ONLINE	Lab
	Th 3:00pm - 3:50pm	ONLINE	Discussion
0103	David Buehrle	Seats (Total: 24)	
	MWF 12:00pm - 12:50pm	ONLINE	
	M 4:00pm - 5:50pm	ONLINE	Lab
	M 3:00pm - 3:50pm	ONLINE	Discussion
0104	David Buehrle	Seats (Total: 24)	
	MWF 12:00pm - 12:50pm	ONLINE	
	W 4:00pm - 5:50pm	ONLINE	Lab
	W 3:00pm - 3:50pm	ONLINE	Discussion
0105	David Buehrle	Seats (Total: 24)	
	MWF 12:00pm - 12:50pm	ONLINE	
	Tu 4:00pm - 5:50pm	ONLINE	Lab
	Tu 3:00pm - 3:50pm	ONLINE	Discussion
0106	David Buehrle	Seats (Total: 24)	
	MWF 12:00pm - 12:50pm	ONLINE	
	M 7:00pm - 8:50pm	ONLINE	Lab
	M 6:00pm - 6:50pm	ONLINE	Discussion
0201	David Buehrle	Seats (Total: 24)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	M 10:00am - 11:50am	ONLINE	Lab
	M 9:00am - 9:50am	ONLINE	Discussion
0203	David Buehrle	Seats (Total: 24)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	M 1:00pm - 2:50pm	ONLINE	Lab
	M 12:00pm - 12:50pm	ONLINE	Discussion

0204	David Buehrle	Seats (Total: 24)	
	TuTh 12:30pm - 1:45pm	ONLINE	
	W 1:00pm - 2:50pm	ONLINE	Lab
	W 12:00pm - 12:50pm	ONLINE	Discussion

PHYS161 **General Physics: Mechanics and Particle Dynamics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS

Prerequisite: Must have completed or be concurrently enrolled in MATH141. Credit only granted for: PHYS141, PHYS161, or PHYS171.

First semester of a three-semester calculus-based general physics course. Laws of motion, force, and energy; principles of mechanics, collisions, linear momentum, rotation, and gravitation.

Physics clinic, PHY 1214, MTWHF 11, 2. If purchasing used books additional software may be required.

0101	David Buehrle	Seats (Total: 30)	
	MWF 3:00pm - 3:50pm	ONLINE	
	Tu 3:00pm - 3:50pm	ONLINE	Discussion
0104	David Buehrle	Seats (Total: 30)	
	MWF 3:00pm - 3:50pm	ONLINE	
	F 11:00am - 11:50am	ONLINE	Discussion
0201	Hailu Gebremariam	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	ONLINE	
	Th 8:00am - 8:50am	ONLINE	Discussion
0202	Hailu Gebremariam	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	ONLINE	
	Tu 2:00pm - 2:50pm	ONLINE	Discussion
0203	Hailu Gebremariam	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	ONLINE	
	W 3:00pm - 3:50pm	ONLINE	Discussion
0204	Hailu Gebremariam	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	ONLINE	
	W 4:00pm - 4:50pm	ONLINE	Discussion

0301	Hailu Gebremariam MWF 10:00am - 10:50am Th 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0302	Hailu Gebremariam MWF 10:00am - 10:50am Tu 4:00pm - 4:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0303	Hailu Gebremariam MWF 10:00am - 10:50am W 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0304	Hailu Gebremariam MWF 10:00am - 10:50am W 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	Discussion

PHYS165 **Introduction to Programming in the Physical Sciences**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS171, PHYS141, or PHYS161; or must have scored 3 or higher on AP PHYS exam.

Introduction to programming using examples in the physical sciences. Provides instruction in the techniques of upper-level languages such as Fortran, C, and Pascal, as well as an introduction to the object oriented programming techniques used in Python, C++ and Java. Includes strong component of visualization and graphing.

0101	Gregory Sullivan TuTh 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 38) IRB 1116 ONLINE	
	Alternating face-to-face/online meeting. See instructor for details.		

PHYS170 **Professional Physics Seminar**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Corequisite: MATH140. Restriction: Must be in Physics program; or must be in Physics-Education program; or permission of instructor.

Provides a look at some of the major developments of current interest in physics research and discusses the activities physicists undertake in research, education, industry, government, and other areas of the economy.

0101	Thomas Gleason, Donna Hammer	Seats (Total: 35)
	W 12:00pm - 12:50pm	ONLINE

PHYS171 **Introductory Physics: Mechanics and Relativity**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS

Prerequisite: (MATH140; and a high school physics course); or permission of CMNS-Physics department. And must have completed or be concurrently enrolled in MATH141. Credit only granted for: PHYS141, PHYS161, or PHYS171.

First semester of a three semester sequence for physics majors and those desiring a rigorous preparation in the physical sciences: kinematics, Newton's laws, energy and work, linear and angular momenta, temperature and pressure, ideal gas law, and special relativity.

In person lecture meetings will occur every other week. Students who can only enroll if the course is fully online will be accommodated, and should contact the instructor. Jointly offered with PHYS171H.

0201	Kara Hoffman	Seats (Total: 55)	
	MWF 9:00am - 9:50am Th 9:00am - 9:50am	PHY 1412 ONLINE	Discussion
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

PHYS171H **Introductory Physics: Mechanics and Relativity**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS

Prerequisite: (MATH140; and a high school physics course); or permission of CMNS-Physics department. And must have completed or be concurrently enrolled in MATH141. Credit only granted for: PHYS141, PHYS161, or PHYS171.

First semester of a three semester sequence for physics majors and those desiring a rigorous preparation in the physical sciences: kinematics, Newton's laws, energy and work, linear and angular momenta, temperature and pressure, ideal gas law, and special relativity.

In person lecture meetings will occur every other week. Students who can only enroll if the course is fully online will be accommodated, and should contact the instructor. Jointly offered with PHYS171.

0201	Kara Hoffman	Seats (Total: 55)	
	MWF 9:00am - 9:50am Th 9:00am - 9:50am	PHY 1412 ONLINE	Discussion

PHYS172 **Succeeding in Physics: Applications, Resources and Concepts**

(Perm req) Credits: 1 Grading Method: Sat-Fail

Corequisite: PHYS171. Restriction: Permission of CMNS-Physics department.

Supplemental instruction and support for students taking PHYS171, especially for students with limited high school physics preparation, or who will benefit from extra review and practice of relevant mathematics and physics concepts and skills.

0101	Peter Shawhan Tu 9:00am - 9:50am	Seats (Total: 8) ONLINE	

PHYS199M The Manhattan Project

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSHS, DSNS, SCIS

Additional information: This course has no prerequisites. However, the course will use mathematics extensively at the level up to and including standard high school algebra II. Students will need to be comfortable applying mathematics at this level.

Introduction to some critical ideas of nuclear physics and a review of some key historical developments starting at the end of the 19th century. Chronological development of nuclear physics from the discovery of radioactivity by Becquerel in 1896 through to the discovery of fission in Germany in 1938 followed by an examination of the programs to develop nuclear weapons in the United States, Britain and Germany. Extensive study of political, ethical, scientific, military, social, and economic issues surrounding the Manhattan Project.

This course explores the development of the atomic bomb during the Manhattan project. Nuclear Physics is introduced in a historical context from the discovery of radioactivity in 1896 to the discovery of nuclear fission in Germany in 1938; this historical approach allows students to understand how scientific knowledge is built up over time.

0101	Thomas Cohen MW 4:00pm - 5:15pm M 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0102	Thomas Cohen MW 4:00pm - 5:15pm M 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion
0103	Thomas Cohen MW 4:00pm - 5:15pm Tu 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

0104	Thomas Cohen MW 4:00pm - 5:15pm W 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

PHYS260 **General Physics: Vibration, Waves, Heat, Electricity and Magnetism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with PHYS261)

Prerequisite: PHYS161 and MATH141. Corequisite: PHYS261. Credit only granted for: PHYS142, PHYS260, or PHYS272.

Second semester of a three-semester calculus-based general physics course. Vibrations, waves, fluids; heat, kinetic theory, and thermodynamics; electrostatics, circuits, and magnetism. PHYS260 and PHYS261 must be taken in the same semester.

If purchasing used books additional software may be required.

0101	Andris Skuja MW 4:30pm - 5:45pm Tu 11:00am - 11:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0102	Andris Skuja MW 4:30pm - 5:45pm W 10:00am - 10:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0104	Andris Skuja MW 4:30pm - 5:45pm W 9:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0105	Andris Skuja MW 4:30pm - 5:45pm F 3:00pm - 3:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0201	Hailu Gebremariam MW 3:00pm - 4:15pm Tu 8:00am - 8:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0202	Hailu Gebremariam MW 3:00pm - 4:15pm Tu 9:00am - 9:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion

0203	Hailu Gebremariam MW 3:00pm - 4:15pm Tu 11:00am - 11:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0204	Hailu Gebremariam MW 3:00pm - 4:15pm F 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0205	Hailu Gebremariam MW 3:00pm - 4:15pm W 12:00pm - 12:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0206	Hailu Gebremariam MW 3:00pm - 4:15pm M 4:30pm - 5:20pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0207	Hailu Gebremariam MW 3:00pm - 4:15pm W 4:30pm - 5:20pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0301	Rabindra Mohapatra TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0302	Rabindra Mohapatra TuTh 2:00pm - 3:15pm W 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0303	Rabindra Mohapatra TuTh 2:00pm - 3:15pm Tu 12:00pm - 12:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0304	Rabindra Mohapatra TuTh 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0305	Rabindra Mohapatra TuTh 2:00pm - 3:15pm Tu 1:00pm - 1:50pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

0501	Hailu Gebremariam TuTh 3:30pm - 4:45pm F 9:00am - 9:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0502	Hailu Gebremariam TuTh 3:30pm - 4:45pm F 12:00pm - 12:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0503	Hailu Gebremariam TuTh 3:30pm - 4:45pm F 10:00am - 10:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0504	Hailu Gebremariam TuTh 3:30pm - 4:45pm W 10:00am - 10:50am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0505	Hailu Gebremariam TuTh 3:30pm - 4:45pm F 2:00pm - 2:50pm	Seats (Total: 31) ONLINE ONLINE	 Discussion

PHYS260H **General Physics: Vibration, Waves, Heat, Electricity and Magnetism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with PHYS261)

Prerequisite: PHYS161 and MATH141. Corequisite: PHYS261. Credit only granted for: PHYS142, PHYS260, or PHYS272.

Second semester of a three-semester calculus-based general physics course. Vibrations, waves, fluids; heat, kinetic theory, and thermodynamics; electrostatics, circuits, and magnetism. PHYS260 and PHYS261 must be taken in the same semester.

If purchasing used books additional software may be required.

0301	Rabindra Mohapatra TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	 Discussion

PHYS261 **General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (Laboratory)**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Corequisite: PHYS260.

Lab includes experiments on mechanics, vibrations, waves, heat, electricity and magnetism. PHYS260 and PHYS261 (lab) must be taken in the same semester.

Students must pay a $50.00 laboratory materials fee.

0202	Matt Severson M 10:30am - 12:50pm	Seats (Total: 36) PHY 3219	Lab
0203	Matt Severson M 1:00pm - 3:20pm	Seats (Total: 36) PHY 3219	Lab
0204	Matt Severson M 4:30pm - 6:50pm	Seats (Total: 36) PHY 3219	Lab
0205	Matt Severson M 7:00pm - 9:20pm	Seats (Total: 36) PHY 3219	Lab
0206	Matt Severson Tu 9:00am - 11:20am	Seats (Total: 36) PHY 3219	Lab
0207	Matt Severson Tu 11:30am - 1:50pm	Seats (Total: 36) PHY 3219	Lab
0208	Matt Severson Tu 2:00pm - 4:20pm	Seats (Total: 36) PHY 3219	Lab
0209	Matt Severson Tu 4:30pm - 6:50pm	Seats (Total: 36) PHY 3219	Lab
0210	Matt Severson Tu 7:00pm - 9:20pm	Seats (Total: 36) PHY 3219	Lab
0212	Matt Severson W 10:30am - 12:50pm	Seats (Total: 36) PHY 3219	Lab
0213	Matt Severson W 1:00pm - 3:20pm	Seats (Total: 36) PHY 3219	Lab
0214	Matt Severson W 4:30pm - 6:50pm	Seats (Total: 36) PHY 3219	Lab

0215	Matt Severson W 7:00pm - 9:20pm	Seats (Total: 36) PHY 3219	Lab
0216	Matt Severson Th 9:00am - 11:20am	Seats (Total: 36) PHY 3219	Lab
0217	Matt Severson Th 11:30am - 1:50pm	Seats (Total: 36) PHY 3219	Lab
0218	Matt Severson Th 2:00pm - 4:20pm	Seats (Total: 36) PHY 3219	Lab
0219	Matt Severson Th 4:30pm - 6:50pm	Seats (Total: 36) PHY 3219	Lab
0221	Matt Severson F 9:00am - 11:20am	Seats (Total: 36) PHY 3219	Lab

PHYS270 **General Physics: Electrodynamics, Light, Relativity and Modern Physics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with PHYS271)

Prerequisite: PHYS261, MATH241, and PHYS260. Corequisite: PHYS271.

Third semester of a three-semester calculus-based general physics course. Electrodynamics, Maxwell's equations and electromagnetic waves, geometrical optics, interference, diffraction, special theory of relativity, and modern physics. PHYS270 and PHYS271 (lab) must be taken in the same semester.

If purchasing used books additional software may be required.

0101	Eun-Suk Seo TuTh 5:00pm - 6:15pm Th 2:00pm - 2:50pm	Seats (Total: 33) ONLINE ONLINE	Discussion
0102	Eun-Suk Seo TuTh 5:00pm - 6:15pm Th 4:00pm - 4:50pm	Seats (Total: 33) ONLINE ONLINE	Discussion
0103	Eun-Suk Seo TuTh 5:00pm - 6:15pm W 9:00am - 9:50am	Seats (Total: 33) ONLINE ONLINE	Discussion

0301	Howard Milchberg Class time/details on ELMs W 1:00pm - 1:50pm	Seats (Total: 34) ONLINE ONLINE	Discussion
0302	Howard Milchberg Class time/details on ELMs W 2:00pm - 2:50pm	Seats (Total: 34) ONLINE ONLINE	Discussion
0303	Howard Milchberg Class time/details on ELMs F 2:00pm - 2:50pm	Seats (Total: 34) ONLINE ONLINE	Discussion
0304	Howard Milchberg Class time/details on ELMs F 3:00pm - 3:50pm	Seats (Total: 34) ONLINE ONLINE	Discussion

PHYS271 **General Physics: Electrodynamics, Light, Relativity and Modern Physics (Laboratory)**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS261. Corequisite: PHYS270.

Lab includes experiments on ac circuits, magnetism, light and modern physics. PHYS270 and PHYS271 (lab) must be taken in the same semester.

Students must pay a $50.00 laboratory materials fee.

0102	Matt Severson M 3:00pm - 5:50pm	Seats (Total: 36) PHY 3213	Lab
0103	Matt Severson M 6:00pm - 8:50pm	Seats (Total: 36) PHY 3213	Lab
0104	Matt Severson W 4:00pm - 6:50pm	Seats (Total: 36) PHY 3213	Lab
0105	Matt Severson Tu 10:00am - 12:50pm	Seats (Total: 36) PHY 3213	Lab
0106	Matt Severson Tu 1:00pm - 3:50pm	Seats (Total: 36) PHY 3213	Lab

0117	Matt Severson Th 11:00am - 1:50pm	Seats (Total: 36) PHY 3213	 Lab
0118	Matt Severson Th 2:00pm - 4:50pm	Seats (Total: 36) PHY 3213	 Lab

PHYS272 **Introductory Physics: Fields**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with PHYS275)

Prerequisite: PHYS161 or PHYS171; and MATH141; and must have completed or be concurrently enrolled in MATH241. Credit only granted for: PHYS142, (PHYS260 and PHYS261) or PHYS272.. Additional information: CORE Distributive Studies Physical Sciences Laboratory Course only when taken concurrently with PHYS275.

Second semester of a calculus based general physics course. Universal gravitation, electric and magnetic fields and potentials, simple circuits, Maxwell's equations in integral form. Continues the application of mathematics to conceptual models, now with more abstract components.

Jointly offered with PHYS 272H.

0101	Richard Greene TuTh 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 54) ONLINE ONLINE	

PHYS272H **Introductory Physics: Fields**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with PHYS275)

Prerequisite: PHYS161 or PHYS171; and MATH141; and must have completed or be concurrently enrolled in MATH241. Credit only granted for: PHYS142, (PHYS260 and PHYS261) or PHYS272.. Additional information: CORE Distributive Studies Physical Sciences Laboratory Course only when taken concurrently with PHYS275.

Second semester of a calculus based general physics course. Universal gravitation, electric and magnetic fields and potentials, simple circuits, Maxwell's equations in integral form. Continues the application of mathematics to conceptual models, now with more abstract components.

For general honors students only. Jointly offered with PHYS 272.

0101	Richard Greene TuTh 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 54) ONLINE ONLINE	

PHYS273 **Introductory Physics: Waves**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH241 and PHYS272. Corequisite: PHYS274.

Oscillations and AC circuits using complex variables, Fourier series and integrals, waves on strings, sound; electromagnetic waves from Maxwell's equations in differential form; physical optics.

Jointly offered with PHYS 273H.

0101	Abolhassan Jawahery	Seats (Total: 62)
	TuTh 12:30pm - 1:45pm	ONLINE
	F 11:00am - 11:50am	ONLINE

PHYS273H **Introductory Physics: Waves**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH241 and PHYS272. Corequisite: PHYS274.

Oscillations and AC circuits using complex variables, Fourier series and integrals, waves on strings, sound; electromagnetic waves from Maxwell's equations in differential form; physical optics.

For general honors students only. Jointly offered with PHYS 273.

0101	Abolhassan Jawahery	Seats (Total: 62)
	TuTh 12:30pm - 1:45pm	ONLINE
	F 11:00am - 11:50am	ONLINE

PHYS274 **Mathematical Methods for Physics I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH241 and PHYS272.

A first course in mathematical methods for physics. Topics include linear algebra, curvilinear coordinates and vector analysis.

0101	Raman Sundrum	Seats (Total: 50)
	MWF 12:00pm - 12:50pm	PHY 1412

PHYS275 **Experimental Physics I: Mechanics and Heat**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS161 or PHYS171; and PHYS174. Additional information: CORE Physical Science Lab (PL) Course only when taken concurrently with PHYS272.

Methods and rationale of experimental physics. Intended for physics majors and science and engineering students who desire a more rigorous approach. Experiments chosen from the areas of mechanics (from PHYS171), gas laws, and heats. Theory and applications of error analysis.

0101	Frederick Wellstood M 2:00pm - 5:50pm	Seats (Total: 12) PHY 3104	 Lab
0201	Frederick Wellstood W 2:00pm - 5:50pm	Seats (Total: 12) PHY 3104	 Lab
0301	Wendell Hill Tu 2:00pm - 5:50pm	Seats (Total: 12) PHY 3104	 Lab
0401	Wendell Hill Th 2:00pm - 5:50pm	Seats (Total: 12) PHY 3104	 Lab

PHYS276 **Experimental Physics II: Electricity and Magnetism**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS272 and PHYS275.

Second course in the three semester introductory sequence. Methods and rationale of experimental physics. Experiments chosen from the fields of electricity and magnetism including electrostatics, magnetostatics, magnetic induction, AC circuits.

0101	Sarah Eno M 2:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 12) PHY 3203 ONLINE	 Lab Lab
0201	Sarah Eno Tu 2:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 12) PHY 3203 ONLINE	 Lab Lab
0301	Norbert Linke Th 2:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 12) PHY 3203 ONLINE	 Lab Lab

0401	Norbert Linke	Seats (Total: 12)	
	W 2:00pm - 5:50pm	PHY 3203	Lab
	Class time/details on ELMs	ONLINE	Lab

PHYS299 **Special Problems in Physics**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement courses taken elsewhere which are not fully equivalent to those in departmental requirements. Credit according to work done.

Contact department for information to register for this course.

PHYS299R **Special Problems in Physics; General Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement courses taken elsewhere which are not fully equivalent to those in departmental requirements. Credit according to work done.

Contact department for information to register for this course.

PHYS332 **Physics for Life Sciences II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS331; or PHYS131; or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS122, PHYS132, or PHYS332.

The second part of a two-semester course in general physics specifically oriented towards applications relevant for students in biology and pre-medical programs. The course covers basic statistical physics, electricity and magnetism, and optics done in authentic biological contexts.

ESG1	David Buehrle	Seats (Total: 20)	
	MWF 12:00pm - 12:50pm	ONLINE	
	M 2:00pm - 5:00pm	ONLINE	Lab
	Registration is restricted to Biological Sciences - Shady Grove majors.		
ESG2	David Buehrle	Seats (Total: 20)	
	MWF 12:00pm - 12:50pm	ONLINE	
	W 2:00pm - 5:00pm	ONLINE	Lab
	Registration is restricted to Biological Sciences - Shady Grove majors.		

PHYS371 **Modern Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS273 and PHYS274. Corequisite: PHYS373. Credit only granted for: PHYS371 or PHYS420. Additional information: This course is intended primarily for physics and astronomy majors.

Introduces students to special relativity, thermodynamics and quantum mechanics at an intermediate level.

0101	Steven Anlage MW 11:00am - 12:15pm	Seats (Total: 68) ONLINE

PHYS373 **Mathematical Methods for Physics II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS273 and PHYS274.

A second course in mathematical methods for physics. Topics include introduction to ordinary differential equations, partial differential equations, and complex analysis.

0101	Zackaria Chacko TuTh 12:30pm - 1:45pm	Seats (Total: 70) ONLINE

PHYS375 **Experimental Physics III: Electromagnetic Waves, Optics and Modern Physics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: PHYS276 and PHYS273.

Third course in the three-semester introductory sequence. Methods and rationale of experimental physics. Experiments chosen from the areas of electromagnetic waves, optics and modern physics.

Besides lab hours scheduled below, additional required lab time will be arranged.

0101	Min Ouyang, Manuel Franco Sevilla M 2:00pm - 2:50pm M 3:00pm - 5:50pm	Seats (Total: 14) ONLINE PHY 3115	 Lab
0102	Manuel Franco Sevilla, Min Ouyang M 2:00pm - 2:50pm W 3:00pm - 5:50pm	Seats (Total: 14) ONLINE PHY 3115	 Lab

0103	Min Ouyang, Manuel Franco Sevilla M 2:00pm - 2:50pm Tu 3:00pm - 5:50pm	Seats (Total: 14) ONLINE PHY 3115	 Lab
0104	Manuel Franco Sevilla, Min Ouyang M 2:00pm - 2:50pm Th 3:00pm - 5:50pm	Seats (Total: 14) ONLINE PHY 3115	 Lab

PHYS386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Contact department for information to register for this course.

PHYS389 **Undergraduate Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Independent directed research and study on a topic selected by the student in consultation with his or her advisor. Final written thesis and oral defense will be expected.

Contact department for information to register for this course.

PHYS398 **Independent Studies Seminar**

(Perm req)

Credits: 1-16 Grading Method: Regular, Pass-Fail, Audit

Credit according to work done. Enrollment is limited to students admitted to the independent studies program in physics.

Contact department for information to register for this course.

PHYS399 **Special Problems in Physics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Selected advanced experiments. (Will be given with sufficient demand.)

Contact department for information to register for this course.

PHYS399D **Special Problems in Physics; Physics STEM Seminar II**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced experiments. (Will be given with sufficient demand.)

0101	Thomas Gleason, Donna Hammer F 9:00am - 9:50am Class time/details on ELMs	Seats (Total: 8) ONLINE ONLINE

PHYS399E **Special Problems in Physics; Physics STEM Seminar III**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Selected advanced experiments. (Will be given with sufficient demand.)

0101	Donna Hammer, Thomas Gleason **Meets September 14, 2020 - December 14, 2020** Contact instructor or department for details.	Seats (Total: 12)

PHYS401 **Quantum Physics I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS371 and PHYS373. Formerly: PHYS421.

Introduces some quantum phenomena leading to wave-particle duality. Schroedinger theory for bound states and scattering in one dimension. One-particle Schroedinger equation and the hydrogen atom.

0101	Christopher Lobb MWF 10:00am - 10:50am W 11:00am - 11:50am	Seats (Total: 55) ONLINE ONLINE

PHYS402 **Quantum Physics II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS401.

Quantum states as vectors; spin and spectroscopy, multiparticle systems, the periodic table, perturbation theory, band structure, etc.

0101	Theodore Jacobson MW 10:00am - 10:50am MW 11:00am - 11:50am	Seats (Total: 49) ONLINE ONLINE

PHYS404 **Introduction to Statistical Thermodynamics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS371 or PHYS420.

Introduction to basic concepts in thermodynamics and statistical mechanics.

0101	James Williams	Seats (Total: 60)
	MWF 9:00am - 9:50am	ONLINE

PHYS405 **Advanced Experiments**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS375. Restriction: Must be in a major within CMNS-Physics department.

Advanced laboratory techniques. Selected experiments from many fields of modern physics. Emphasis on self-study of the phenomena, data analysis, and presentation in report form.

0101	Peter Shawhan	Seats (Total: 20)	
	W 12:00pm - 12:50pm	ANS 0408	Lab
	TBA	PHY 3112	Lab

PHYS407 **Undergraduate Experimental Research**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: PHYS499 and PHYS375; and permission of CMNS-Physics department. Restriction: Must be in a major within CMNS-Physics department; and senior standing.

Students develop and complete an independent, experimental research project with a professor in the Physics Department. The project should be a continuation of work done in PHYS499A. To obtain permission, students must submit a proposal describing the experimental work to be completed and this proposal must be approved by their faculty mentor, the associate chair for undergraduate education and the chair of the laboratory committee. Students must maintain a lab notebook, give an oral presentation and complete a written report on their research that includes data and error analysis.

0101	Carter Hall	Seats (Total: 10)
	Contact instructor or department for details.	

PHYS410 **Classical Mechanics**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS373.

Theoretical foundations of mechanics with extensive application of the methods. Various mathematical tools of theoretical physics.

0101	Adil Hassam	Seats (Total: 65)
	TuTh 11:00am - 12:15pm	ONLINE
	F 11:00am - 11:50am	ONLINE

PHYS411 **Intermediate Electricity and Magnetism**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS373.

Foundations of electromagnetic theory, with extensive applications of the methods. Thorough treatment of wave properties of solutions of Maxwell's equations.

0101	Victor Yakovenko	Seats (Total: 61)
	TuTh 12:30pm - 1:45pm	ONLINE
	F 12:00pm - 12:50pm	ONLINE

PHYS431 **Introduction to Solid State Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS271, PHYS270, and MATH241. Restriction: Junior standing or higher; and must be in Engineering: Materials Science program. Cross-listed with: ENMA460. Credit only granted for: ENMA460 or PHYS431.

Classes of materials; introduction to basic ideal and real materials' behavior including mechanical, electrical, thermal, magnetic and optical responses of materials; importance of microstructure in behavior. One application of each property will be discussed in detail.

0101	Ichiro Takeuchi	Seats (Total: 15)
	MW 5:00pm - 6:15pm	ONLINE
	Contact instructor or department for details.	

PHYS467 **Introduction to Quantum Technology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH141 and MATH240 or equivalent. Recommended: Students need not have taken a course on quantum mechanics; however, students should be comfortable with: probability theory, Markov chains, complex numbers, quantum states, measurements, unitary operations, matrix algebra, Pauli matrices, the tensor product, waves, the harmonic oscillator, the quantum harmonic oscillator, and the Schrodinger equation.

Investigates the physical systems used to implement quantum computers. Covers basics of atomic clocks, laser interferometers, quantum key distribution, quantum networks, and three types of qubits (ion-based, superconductor-based, and semiconductor-based).

Cross-listed with ENEE489B. Credit granted for PHYS467 or ENEE489B.

0101	James Williams	Seats (Total: 40)
	TuTh 9:30am - 10:45am Class time/details on ELMs	PHY 1410 ONLINE

PHYS475 **Introduction to Relativity, Gravitation and Cosmology**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS373 and PHYS410; or permission of instructor. Restriction: Permission of CMNS-Physics department. Jointly offered with: PHYS675. Additional information: Intended primarily for undergraduate physics majors.

Review of special relativity, followed by a study of the equivalence principle, curved spacetimes, and Einstein's equations. Selected applications to the solar system, stellar structure, black holes, gravitational waves, and cosmology.

0101	Bei Lok Hu	Seats (Total: 10)	
	MW 1:00pm - 2:15pm F 1:00pm - 1:50pm	ONLINE ONLINE	 Discussion

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PHYS485 **Electronic Circuits**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS405. Corequisite: PHYS374. Restriction: Must be in a major within CMNS-Physics department.

Theory and application to experimental physics of modern semiconductor analog and digital circuits. Emphasis on understanding passive and active elements in practical circuits. Topics span the range from simple transistor circuits to microcomputers.

Additional Note: Jointly offered with PHYS685. Credit only granted for PHYS485 or PHYS685.

0101	Daniel Lathrop	Seats (Total: 24)	
	MF 2:00pm - 2:50pm Class time/details on ELMs W 1:00pm - 4:50pm	PLS 1140 ONLINE PHY 3306	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		
0102	Daniel Lathrop	Seats (Total: 14)	
	MF 2:00pm - 2:50pm Class time/details on ELMs Tu 1:00pm - 4:50pm	PLS 1140 ONLINE PHY 3306	Lab
	Alternating face-to-face/online class meeting. Please see instructor fo details.		

PHYS499A **Special Problems in Physics**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Research or special study. Credit according to work done.

Contact department for information to register for this course.

PHYS499B **Special Problems in Physics**

(Perm req)

Credits: 1-16 Grading Method: Regular, Pass-Fail, Audit

Research or special study. Credit according to work done.

Contact department for information to register for this course.

PHYS499V **Special Problems in Physics; Colloquium for Undergraduate Physics Majors**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Research or special study. Credit according to work done.

0101	Instructor: TBA	Seats (Total: 60)
	Th 4:00pm - 6:15pm	ONLINE

PHYS601 **Theoretical Dynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PHYS410; or students who have taken courses with comparable content may contact the department.

Lagrangian and Hamiltonian mechanics, two-body central force problem, rigid body motion, small oscillations, continuous systems.

0101	Paulo Bedaque	Seats (Total: 49)
	TuTh 12:30pm - 1:45pm	ONLINE

PHYS604 **Methods of Mathematical Physics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed coursework in advanced calculus; and (PHYS411 and PHYS410). Or students who have taken courses with comparable content may contact the department.

Ordinary and partial differential equations of physics, boundary value problems, Fourier series, Green's functions, complex variables and contour integration.

0101	James Drake	Seats (Total: 50)
	TuTh 9:30am - 10:45am	ONLINE

PHYS622 **Introduction to Quantum Mechanics I**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Prerequisite: Must have an outstanding undergraduate background in physics.

First and second semesters. A study of the Schroedinger equation, matrix formulations of quantum mechanics, approximation methods, scattering theory, etc. Applications to solid state, atomic, and nuclear physics.

0201	Kaustubh Agashe	Seats (Total: 67)
	MW 10:00am - 10:50am	ONLINE
	F 10:00am - 11:50am	ONLINE

PHYS624 **Advanced Quantum Mechanics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PHYS623.

Relativistic wave equations, second quantization in many body problems and relativistic wave equations, Feynman-Dyson perturbation theory, applications to many body problems, application to quantum electrodynamics, elements of renormalization.

0101	Anson Hook	Seats (Total: 38)	
	TuTh 9:30am - 10:45am	ONLINE	

PHYS626 **Modern Condensed Matter Physics II: Scaling and Renormalization**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PHYS603 and PHYS623.

Phase transitions in many-body systems, phase diagrams, scaling invariance of critical points, renormalization group methods, the Berezinskii-Kosterlitz-Thouless transition, dualities, quantum phase transitions, Renormalization-group approach to interacting fermions (Fermi liquid as a fixed point, Fermi liquid instabilities).

0101	Jay Sau	Seats (Total: 40)	
	WF 10:30am - 11:45am	ONLINE	

PHYS675 **Introduction to Relativity, Gravitation and Cosmology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PHYS606 and PHYS601.

Review of special relativity, followed by a study of the equivalence principle, curved spacetimes, and Einstein's equations. Selected applications to the solar system, stellar structure, black holes, gravitational waves, and cosmology.

0101	Bei Lok Hu	Seats (Total: 28)	
	MW 1:00pm - 2:15pm	ONLINE	
	F 1:00pm - 1:50pm	ONLINE	Discussion

PHYS685 **Research Electronics**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: PHYS374 or PHYS405; or students who have taken courses with comparable content may contact the department. Restriction: Must not have completed PHYS485. Credit only granted for: PHYS485 or PHYS685.

An integrated lecture and laboratory course in electronics with equal emphasis on experimental methods and results and analysis using device models and up-to-date mathematical and numerical tools. Experiments and analysis of circuits with passive and single active devices form the background for the study of operational amplifiers, digital integrated circuits and systems, and microcomputers. The general topics of impedance matching, frequency response, feedback, interfacing and the extraction of signal from noise are stressed.

Additional Note: Jointly offered with PHY485. Credit only granted for PH YS685or PHYS485.

0101	Daniel Lathrop MF 2:00pm - 2:50pm Class time/details on ELMs W 1:00pm - 4:50pm	Seats (Total: 24) PLS 1140 ONLINE PHY 3306	 Lab
0102	Daniel Lathrop MF 2:00pm - 2:50pm Class time/details on ELMs Tu 1:00pm - 4:50pm	Seats (Total: 14) PLS 1140 ONLINE PHY 3306	 Lab

PHYS709 **Seminar in General Physics; Statistical Physics**

Credits: 1 Grading Method: Regular, Audit

Cross-listed with CHPH709B.

0101	John Weeks Tu 1:15pm - 2:30pm	Seats (Total: 30) ONLINE	

PHYS715 **Chaotic Dynamics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PHYS601.

Theory and applications of chaos in dynamical systems including such topics as strange attractors, Lyapanov exponents, quasiperiodicity, period doubling, intermittency, crises, fractal basin boundaries, chaotic scattering, KAM tori, and quantum chaos.

0101	Edward Ott TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE	

PHYS721 **Atomic and Optical Physics I (Survey)**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: PHYS623.

A survey of topics involving the physics of atoms and their interaction with radiation, including atoms in external fields, lasers, atomic spectroscopy and atomic structure.

0101	Alicia Kollar WF 2:30pm - 3:45pm Class time/details on ELMs	Seats (Total: 25) PHY 1412 ONLINE
	Students unable to attend in person will be accommodated.	

PHYS728 **Seminar in Atomic and Molecular Physics**

Credits: 1

Grading Method: Regular, Audit

0101	Steven Rolston M 11:00am - 12:50pm	Seats (Total: 30) ONLINE

PHYS732 **Introduction to Solid State Physics II**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: PHYS731.

Second semester of survey course in condensed matter physics including topics in semiconductors, surface physics, magnetism and superconductivity.

0101	Maissam Barkeshli MW 1:00pm - 2:15pm	Seats (Total: 25) ONLINE

PHYS738 **Seminar in Experimental Solid State Physics; Quantum Mechanical Many-Body Problems**

Credits: 1

Grading Method: Regular, Audit

0101	Johnpierre Paglione Th 2:00pm - 3:50pm	Seats (Total: 15) ONLINE

PHYS739 **Seminar in Theoretical Solid State Physics; Quantum Mechanical Many-Body Problems**

Credits: 1

Grading Method: Regular, Audit

0101	Sankar Das Sarma Tu 11:00am - 12:15pm	Seats (Total: 15) ONLINE

PHYS749 **Seminar in Theoretical Nuclear Physics**

Credits: 1 Grading Method: Regular, Audit

0101	Xiangdong Ji W 4:00pm - 6:00pm	Seats (Total: 20) ONLINE

PHYS758E **Seminar in Elementary Particles and Quantum Field Theory; Seminar in Elementary Particles and Quantum Field Theory**

Credits: 1 Grading Method: Regular, Audit

0101	Alberto Belloni W 4:00pm - 5:50pm	Seats (Total: 25) ONLINE

PHYS759 **Seminar in Elementary Particles and Quantum Field Theory**

Credits: 1 Grading Method: Regular, Audit

0101	Kaustubh Agashe M 3:00pm - 4:00pm	Seats (Total: 15) ONLINE

PHYS769 **Seminar in Plasma Physics**

Credits: 1 Grading Method: Regular, Audit

Class will meet in ERF 1207.

0101	Adil Hassam W 4:00pm - 5:15pm	Seats (Total: 20) ONLINE

PHYS778 **Seminar in Space and Cosmic Ray Physics**

Credits: 1 Grading Method: Sat-Fail, Audit

0101	Eun-Suk Seo M 4:30pm - 5:45pm	Seats (Total: 20) ONLINE

PHYS780 **Network Science Literature Survey Seminar**

Credits: 1 Grading Method: Regular, Audit

Credit only granted for: PHYS780 or PHYS798T. Formerly: PHYS798T.

Identify and develop a research project in Network Science. Practice communicating scientific results and concepts to individuals in their own field and in other fields to which the research is applicable.

0101	Michelle Girvan, Daniel Serrano W 1:00pm - 1:50pm	Seats (Total: 25) ONLINE

PHYS782 **Interdisciplinary Research and Communication Practicum for Data-Driven Science**

Credits: 3 Grading Method: Regular

Credit only granted for: PHYS782 or PHYS798N. Formerly: PHYS798N.

Semester-long, individual research project under the direction of a faculty mentor. Students will concurrently use this project to develop and refine their communication skills of scientific concepts. Will address interdisciplinary communication with some discussion of data exploration, analysis, and visualization.

0101	Daniel Serrano, Michelle Girvan MW 11:00am - 12:15pm	Seats (Total: 25) ONLINE

PHYS798 **Special Problems in Advanced Physics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Projects or special study in advanced physics.

Contact department for information to register for this course.

PHYS798B **Special Problems in Advanced Physics; Physics Colloquium**

Credits: 1 Grading Method: Regular, Audit

Projects or special study in advanced physics.

0101	Thomas Cohen	Seats (Total: 160)
	Tu 3:30pm - 6:00pm	ONLINE

PHYS798L **Special Problems in Advanced Physics; Biophysics**

Credits: 1 Grading Method: Regular, Audit

Projects or special study in advanced physics.

0101	Arpita Upadhyaya	Seats (Total: 20)
	M 4:00pm - 5:30pm	ONLINE

PHYS799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

PHYS838C **Special Topics in Experimental Solid State Physics; Superconductivity, Quantum Materials and Nanoscience Seminar**

Credits: 2 Grading Method: Regular, Audit

Credit according to work done.

0101	Johnpierre Paglione	Seats (Total: 50)
	M 4:00pm - 5:50pm	ONLINE

PHYS839A **Special Topics in Theoretical Solid State Physics; Theory of Low Dimensional Systems**

Credits: 1 Grading Method: Regular, Audit

Credit according to work done.

0101	Sankar Das Sarma	Seats (Total: 20)
	F 4:00pm - 7:00pm	ONLINE

PHYS889E **Special Topics in Interdisciplinary Problems; Seminar in Physics Education Research**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Credit according to work done.

0101	Chandra Turpen M 3:00pm - 3:50pm	Seats (Total: 25) ONLINE	

PHYS898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PHYS899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

PLCY Public Policy Fall 2020

PLCY100 **Foundations of Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

A survey course, focusing on public policy institutions and analytical issues as well as on overview of key public policy problems. Students will be introduced to public policy as a discipline, with a brief overview of the actors and institutions involved in the process, and familiarize themselves with the kinds of problems typically requiring public action. The course will examine these problems from a multijurisdictional and multisectoral perspective. Specific policy areas examined include education policy, health policy, economic and budgetary policy, criminal justice policy, environmental policy, and national and homeland security policy. The course should permit students to have broad foundational exposure to the field that will give them a solid base for more advanced courses.

0101	M Apolonia Calderon MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0102	M Apolonia Calderon MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0103	M Apolonia Calderon MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion
0104	M Apolonia Calderon MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 28) ONLINE ONLINE	 Discussion

0201	M Apolonia Calderon MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 28) ONLINE ONLINE	Discussion
0202	M Apolonia Calderon MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 28) ONLINE ONLINE	Discussion
0203	M Apolonia Calderon MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 28) ONLINE ONLINE	Discussion

PLCY101 **Great Thinkers on Public Policy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Great ideas in public policy, such as equality, efficiency, sovereignty, liberty, bureaucracy, democracy and security are explored through the lens of great thinkers. An introduction to the intellectual foundations of public policy, from ancient theories on collective public action through the more contemporary development of public policy as a discipline. This may start as early as the ancient Greek philosophers and their views on public action through contemporary classics of public policy. At the conclusion of the course, students will have read classic works in the field and will master the key themes that have dominated the intellectual debates about public policy over its history. Emphasis will be on the interdisciplinary foundations of public policy, through examining core disciplinary contributions from economics, political science, management, philosophy, and other relevant disciplines.

0101	Gregory Ramsay MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE	Discussion
0102	Gregory Ramsay MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion
0103	Gregory Ramsay MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE	Discussion

PLCY201 **Public Leaders and Active Citizens**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSSP, SCIS

Credit only granted for: PLCY201 or PUAF201. Formerly: PUAF201.

Aims to inspire, teach and engage students in the theory and practice of public leadership from the local to the national to the global level. Students will learn and apply diverse approaches to leadership in a multicultural society while developing an understanding of key frameworks and practices necessary to foster collective action across private, public, and nonprofit sectors. This course will allow students to become informed citizens able to reason critically and persuasively about public matters Students will also explore and assess their own personal values, beliefs, and purpose as they develop their leadership potential.

0101	Susannah Washburn TuTh 2:00pm - 3:15pm *Restricted to freshman students in College Park Scholars Public Leadership program.*	Seats (Total: 96) ONLINE
0201	Nancy Lineman Tu 5:15pm - 7:45pm	Seats (Total: 59) ONLINE
0301	Anne Kaiser TuTh 2:00pm - 3:15pm	Seats (Total: 64) ONLINE
FC01	Tiffany Ford TuTh 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 40) ONLINE
FC02	Tiffany Ford TuTh 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 40) ONLINE

PLCY203 **Liberty and Justice for All: Ethics and Moral Issues in Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Students will broaden their understanding of the moral dimensions of public policy as well as their own individual moral perspective. Discussions will include the ideal of a just society, and the place of liberty and equality in it, while focusing on contemporary theories of ethics and justice. It will develop students' appreciation of the ethical challenges unique to the public service sector while building their skills in ethical analysis and decision-making. We will explore the increasing ethical challenges in a world in which technology, global risks, and societal developments are accelerating faster than our understanding can keep pace. A framework for ethical decision-making underpins the course.

0101	Jennifer Littlefield TuTh 12:30pm - 1:45pm	Seats (Total: 40) ONLINE

0201	Mathew Feehan MW 7:30pm - 8:45pm	Seats (Total: 40) ESJ 1202
0301	Daniel Levine Th 6:00pm - 8:30pm *For students with an interest in global dimensions of Public Policy.*	Seats (Total: 40) ONLINE

PLCY213 **Foundations of Nonprofit Leadership and Social Innovation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Through discussions of contemporary trends, challenges and issues, this course provides an introduction to the nonprofit and NGO sectors, social innovation, and the leadership and management skills required to achieve social impact. The course will explore the history, theories, and roles of philanthropy, the nonprofit sector, and social innovation in societies and cultures. Students will be able to demonstrate an understanding of the process and principles of social entrepreneurship and social innovation. Additionally, the course will introduce students to topics in leadership, social innovation, resource development, community mobilization through networks, the role of policy-making in creating change, project management, and overall strategies for achieving social impact. The course will include mini hands-on learning experiences that allow them to apply key learning outcomes.

0101	Robert Grimm TuTh 3:30pm - 4:45pm	Seats (Total: 40) ONLINE
0201	Alexander Counts W 3:00pm - 5:30pm	Seats (Total: 40) ONLINE

PLCY214 **Leading and Investing in Social Change: Re-defining and Experimenting with Philanthropy**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

Credit only granted for: PLCY214, PUAF214 or PUAF359I. Formerly: PUAF359I, PUAF214.

Defines philanthropy as an exploration of how one develops a vision of the public good and then deploys resources (including donations, volunteers, and voluntary associations) to achieve an impact.

Restricted to students in Carillon Communities.

0101	Patricia Bory TuTh 2:00pm - 3:15pm *Restricted to students in the iGive Living Learning Program.*	Seats (Total: 65) ONLINE

PLCY300 **Governance: Collective Action in the Public Interest**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLCY100. Restriction: Must be in a major in PLCY-School of Public Policy.

Examination of societal responses to public problems, including actions by government, non-profit and private sector actors, as well as civil society. Students will examine the roles of these various actors, as well as the nature of civic responsibility. The course will examine the various stages of the policy process, asking the following questions: How does something get defined as a problem that requires a public policy response? How do we think about what the options are for this response, and how do we choose among them? What are the factors that contribute to successful policy implementation? How do we evaluate the success of public policies? These questionswill be addressed using examples of current public policy problems, and students will be expected to engage in individual and collaborative work to design responses to those problems.

0101	Alana Hackshaw TuTh 9:30am - 10:45am	Seats (Total: 40) ONLINE
0102	Alana Hackshaw TuTh 12:30pm - 1:45pm	Seats (Total: 40) ONLINE

PLCY301 **Sustainability**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with AGNR301. Credit only granted for: AGNR301, PUAF301, or PLCY301. Formerly: PUAF301.

Designed for students whose academic majors would be enhanced by the complementary study of a widely shared but hard-to-operationalize aspiration: that present choices should preserve or improve future options rather than foreclose or degrade them. How should we understand sustainability? How might we achieve it? How would we know if we had achieved it? And how could sustainability activists of a rising generation lead by example?

0101	Caroline Boules TuTh 12:30pm - 1:45pm	Seats (Total: 165) ONLINE

PLCY302 **Examining Pluralism in Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Credit only granted for: PLCY302 or PUAF302. Formerly: PUAF302.

Understanding pluralism and how groups and individuals coexist in society is an essential part of the public policy process. This course will examine the ways in which the diverse experiences of race, gender, ethnicity, class, orientation, identity, and religion impact the understanding of and equitable delivery of public policy. The examination of how identity development shapes our understanding of society and influences the decision-making process is central to students' shaping policy that is truly for the people. This course will equip students with the skills needed to analyze pluralism and draw conclusions about the application of various theories to public policy issues.

0101	Eric Luedtke W 4:15pm - 6:45pm *Restriction: Must be in the Rawlings Undergraduate Leadership Fellows Program.*	Seats (Total: 25) ONLINE	
0201	Alana Hackshaw M 2:00pm - 4:30pm	Seats (Total: 35) ONLINE	
0301	Chloe Schwenke MW 6:00pm - 7:15pm	Seats (Total: 35) ONLINE	

PLCY304 **Evaluating Evidence: Finding Truth in Numbers**

Credits: 4 Grading Method: Regular

Prerequisite: STAT100. Restriction: Must be in a major in PLCY-School of Public Policy.

Enables students to understand the research done by others with a sufficiently skeptical eye to allow them to determine whether the findings of the research are valid given the assumptions made and methods used. This will involve, in part, thinking about the various problems in research design or conduct that could lead to faulty conclusions. It will also involve being able to differentiate between credible sources of information and those that are not objective. At the conclusion of the course, students should be able to differentiate objective evidence from political argumentation.

0101	Michael Busse TuTh 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0201	Michael Busse TuTh 2:00pm - 3:15pm F 11:00am - 11:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0301	Michael Busse TuTh 5:00pm - 6:15pm W 10:00am - 10:50am	Seats (Total: 30) ONLINE ONLINE	 Discussion

PLCY306 **Public Policy Analysis in Action**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must have earned a minimum of 60 credits; and must be in a major in PLCY-School of Public Policy.

Utilizes our unique location in the Washington, D.C. region to create a laboratory within which to analyze local, regional, national and international policy problems. Students will be put into teams and assigned to real and timely policy cases. The course will include meetings and field trips with local leaders in the field, ideally connected to the cases. Student will then expand and apply their use of policy analysis and evaluation skills to define those problems, analyze alternative responses, devise appropriate strategies for implementation, and evaluate the success of the proposed policy and implementation. The course will conclude with team presentations to local leaders and faculty. This distinctive course will serve to prepare students for their client- based senior capstone course.

0101	MIchael Bodaken	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	ONLINE

PLCY309 **Internship in Political Institutions: State and Local**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Offers students supervised internship placements in state and local political or public policy organizations.

0101	Jennifer Littlefield	Seats (Total: 25)
	Contact instructor or department for details.	

PLCY310 **Nonprofit Leadership and Social Innovation in Action**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLCY 213.

Furthers students understanding of topics in leadership, social innovation, resource development, community mobilization through networks, and the role of policy making in creating change. This course will further students understanding of the creation and leadership of nonprofits, social ventures, governance and boards; strategic planning and partnerships; advocacy and public policy processes; community outreach; working in teams, effective communications, and cross-sector approaches to scaling up social impact.

0101	Jeffrey Franco	Seats (Total: 45)
	Tu 6:00pm - 8:30pm	ONLINE

PLCY311 **Women in Leadership**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PUAF311, PLCY311 or PUAF359W. Formerly: PUAF359W.

Examines the role of women in the leadership process including the participation of women as activists, voters, advocates, public leaders and as agents of change through various avenues including, among others, public service (elected and appointed), the media, community service, political organizations, and the nonprofit sector.

0101	Anne Kaiser	Seats (Total: 31)
	Tu 4:15pm - 6:45pm	ONLINE

PLCY313 **Advocacy in the American Political System**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PUAF313, PLCY313 or PUAF359C. Formerly: PUAF359C.

Introduces students to the creation of law through the legislative process with a special focus on the Maryland General Assembly.

0101	Gerard Evans	Seats (Total: 100)
	M 2:00pm - 4:30pm	ONLINE

PLCY386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular

Prerequisite: Permission of PLCY-School of Public Policy. Credit only granted for: PLCY386 or PUAF386. Formerly: PUAF386.

0101	Nina Harris	Seats (Total: 10)
	Contact instructor or department for details.	

PLCY388 **Special Topics in Public Policy**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

0101	Nina Harris Contact instructor or department for details.	Seats (Total: 10)
0201	Jennifer Littlefield Class time/details on ELMs	Seats (Total: 30) ONLINE

PLCY388A **Special Topics in Public Policy; Child and Family Policy Impact**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Jointly offered with FMSC498P. Credit only granted for PLCY388A or FMSC4 98P. For poor and low-income families, federal programs such as Medicaid , Child care, SNAP and child nutrition programs are a lifeline every day. Some programs also have policies that consider more than income eligibility, such as number of hours of work, disability, and immigration status. Budget choices have a significant impact on pol icy intentions. Students will learn about and analyze the major federal programs and federal budgets for these policy areas; understand fro m data the impact of such programs and policies; and be introduced to significant advocacy efforts and considerations that shaped hese po licy decisions.

0101	Adele Robinson TuTh 9:30am - 10:45am	Seats (Total: 24) ONLINE

PLCY388D **Innovation and Social Change: Do Good Now**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP, SCIS

Credit only granted for: ARHU380, BSOS388B, PLCY388D, or PLCY380. Formerly: PLCY388D.

Introduces students to the concept of social innovation while exploring the many mechanisms for achieving social impact. It is team-based, highly interactive and dynamic, and provides an opportunity for students to generate solutions to a wide range of problems facing many communities today. Deepens the students understanding of entrepreneurship and innovation practices by guiding them through the creation and implementation process as applied to a project idea of their choice.

Introduces students to the concept of social innovation while exploring the many mechanisms for achieving social impact. It is team-based, highly interactive and dynamic, and provides an opportunity for students to generate solutions to a wide range of problems facing many communities today. Deepens the students understanding of entrepreneurship and innovation practices by guiding them through the creation and implementation process as applied to a project idea of their choice.

0101	Katlin Gray, Joannie Tremblay-Boire TuTh 2:00pm - 3:15pm	Seats (Total: 40) ONLINE

0201	Toby Egan	Seats (Total: 40)
	M 2:00pm - 4:30pm	ONLINE

PLCY388G **Global Perspectives on Leading and Investing in Social Change**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, SCIS

Today, philanthropic and nonprofit organizations play significant roles in shaping how public policy gets developed and implemented, as well as how change occurs in society. This course will define philanthropy as an exploration of how one develops a vision of the public good and then how a person or group can deploy resources to achieve a positive and lasting impact. During the semester, the class will go through the challenging and exciting process of ultimately granting approximately $7,500 to an organization that we believe can use these resources to achieve an impact on an issue of international significance. Our class grant deliberations and decisions will ultimately lead us to confront, question, and sharpen our philanthropic values, decisions, and leadership skills.

0101	Angela Bies	Seats (Total: 40)
	Tu 2:00pm - 4:30pm	ONLINE

PLCY388M **Special Topics in Public Policy; Homeland Security and World Order**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Protecting the Nation's homeland security involves the careful integration of many agencies' efforts and resources- both human and material. An important dynamic element in policy making is the significance of American Federalism to the national division of labor addressing security problems. Our federal structure creates unique prohibitions on the use of federal power, but also facilitates experimentation in meeting critical security and emergency preparedness requirements. This course will anchor the exploration of homeland security policy in an appreciation of America's federal history, and address responses to threats and challenges from critical infrastructure cybersecurity to counter terrorism and securing the US' borders and littoral economic interests.

0101	David Mussington	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

PLCY388Q **Special Topics in Public Policy; Introduction to International Security**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

This course will familiarize students new to international security policy with major concepts, debates, and challenges in the field. Some of today's most important problems, including potential conflicts between great powers, violence by governments against their own people and by terrorist organizations, and the disruptive effects of powerful new technology have existed in various forms for centuries.

0101	Charles Harry	Seats (Total: 26)
	TuTh 2:00pm - 3:15pm	ONLINE

PLCY388T **Special Topics in Public Policy; Undergraduate Teaching Assistant Directed Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Contact department for information to register for this course.

PLCY400 **Senior Capstone**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: PLCY306. Restriction: Permission of PLCY-School of Public Policy; and must have earned a minimum of 90 credits.

Public Policy students will take the skills and knowledge gained through their curriculum and apply them through their senior capstone course. Students will work in teams on problems and issues presented by outside clients, with guidance from faculty facilitators and interaction with the clients. Each team will work with the client to address a particular problem and produce a mutually agreed upon outcome. These hands on projects will advance students' understanding of the analytical, leadership, communication and problem solving skills necessary to address today's policy problems while allowing them to gain professional level experience that could contribute to their success in their post UMD endeavors. The course will conclude with an event that allows all teams to present their findings and outcomes to their client while being evaluated by faculty and public policy professionals.

0101	Juan Martinez Guzman	Seats (Total: 25)
	Th 2:00pm - 4:30pm	ONLINE

PLCY401 **Contemporary Issues in Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must have earned a minimum of 90 credits.

An integrative course that allows policy students to explore the complexities of the policy-making process from the perspective of specific policy topics. They will learn about and discuss subject- based issues in a seminar format led by faculty and policy experts. Site visits to federal agencies, guest speakers, and round table sessions ensure that students receive a variety of real-world perspectives on their chosen policy area.

0101	Mathew Feehan Tu 6:00pm - 8:30pm	Seats (Total: 40) ESJ 1202	
	Examines the history, policies and national security decision-making processes that define modern warfare.		

PLCY610 **Quantitative Aspects of Public Policy**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY610 or PUAF610. Formerly: PUAF610.

Introduces statistical methods needed for evaluating and choosing among policy options. Topics include probability; decision-making under uncertainty; the organization, interpretation, and visual display of complex data; prediction and inferences about causality; hypothesis testing; and linear and multiple regression. Develops analytical skills and the ability to apply theory to complex, real-world problems.

0201	Alec Worsnop W 4:15pm - 6:45pm M 4:15pm - 6:45pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0401	Alec Worsnop Th 9:15am - 11:45am M 9:15am - 11:45am	Seats (Total: 30) ONLINE ONLINE	 Discussion

PLCY611 **Quantitative Analysis of Policy Issues**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY611 or PUAF611. Formerly: PUAF611.

Study of a series of problems and the development of quantitative techniques to describe or evaluate the problem. The organization and interpretation of complex data and its use for prediction and inference about casual effects. The definition of objectives, trade-offs among objectives, and allocation of resources to meet objectives. Sensitivity of outcomes to changing conditions.

0101	Seth Weissman M 4:15pm - 6:45pm W 4:15pm - 6:45pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

PLCY640 **Microeconomic and Policy Analysis**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY640 or PUAF640. Formerly: PUAF640.

Applies intermediate microeconomic theory to public policy issues: resource allocation by firms and consumers; the response of economic agents to changes in incentives; market allocations in competitive and non-competitive environments; and market failures and government remedies. Uses extended case studies of particular issues in such areas as the environment (acid rain), international trade (tariffs), industry regulation (cable TV), and the provision of public goods (highways).

0101	Yueming Qiu W 1:30pm - 4:00pm Tu 4:15pm - 6:45pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0201	Yueming Qiu Tu 1:30pm - 4:00pm M 1:30pm - 4:00pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0401	Michael Busse M 7:00pm - 9:30pm F 4:15pm - 6:45pm	Seats (Total: 40) ONLINE ONLINE	 Discussion

PLCY641 **Macroeconomics and Policy Analysis**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY641 or PUAF641. Formerly: PUAF641.

Studies the behavior of the economy as a whole: the level of national income, unemployment, and inflation; the vulnerability of the U.S. economy to external influences; possible federal influence over the level of economic activity; and the consequences for prices, employment and the U.S. trade deficit. Also examines possible U.S. policy responses to widespread debt crises in developing countries.

0101	John Green M 1:30pm - 4:00pm W 9:15am - 11:45am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0201	Anthony Sanford M 7:00pm - 9:30pm Tu 7:00pm - 9:30pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

PLCY650 **Moral Dimensions of Public Policy**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY650 or PUAF650. Formerly: PUAF650.

Explores the moral issues involved in public policy questions; the limits and usefulness of decision-making tools; problems of choosing, justifying and using criteria to judge a program's success and suitability; ethichal issues involving the welfare state and income distribution; and possible obligations beyond one's political community and generation.

Contact department for information to register for this course.

PLCY670 **Public Budgeting & Financial Management**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLYC670 or PUAF670. Formerly: PUAF670.

Covers how governments raise, spend, borrow, and manage public funds. Reviews federal,state, and local budget processes and introduces analytical techniques including basic spreadsheet skills, evaluating alternative revenue sources, revenue and expenditure forecasting, cost allocation, capital budgeting, cost-benefit analysis, discounting and present value, bond analysis, cash management and intergovernmental finance.

Prerequisites PUAF 610 and 640.

0101	Juan Martinez Guzman Tu 1:30pm - 4:00pm	Seats (Total: 20) ONLINE
0201	Thomas Spreen W 7:00pm - 9:30pm	Seats (Total: 20) ONLINE

PLCY688E **Topics in Public Policy; Governance: Normative & Political Dimensions**

Credits: 3

Grading Method: Regular, Audit

Special topics in Public Policy.

PUAF major or permission of instructor.

0101	Eric Luedtke Th 4:15pm - 6:45pm	Seats (Total: 25) ONLINE
0201	Catherine Worsnop W 9:15am - 11:45am	Seats (Total: 25) ONLINE
0301	Catherine Worsnop Th 9:15am - 11:45am	Seats (Total: 25) ONLINE
0401	Eric Luedtke Th 7:00pm - 9:30pm	Seats (Total: 25) ONLINE

PLCY688F **Topics in Public Policy; State, Local, and NonProfit Financial Mgmt**

Credits: 3

Grading Method: Regular, Audit

Special topics in Public Policy.

Contact department for information to register for this course.

PLCY688G **Topics in Public Policy; Governance: Leadership, Management and Accountability**

Credits: 3

Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0201	Samuel McCann W 7:00pm - 9:30pm	Seats (Total: 15) ONLINE
0301	Elizabeth Duke Tu 9:15am - 11:45am	Seats (Total: 25) ONLINE

PLCY688I **Topics in Public Policy; Macroeconomic Analysis**

Credits: 2

Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	John Green	Seats (Total: 10)	
	M 1:30pm - 4:00pm	ONLINE	
	W 9:15am - 11:45am	ONLINE	Discussion
0201	Anthony Sanford	Seats (Total: 10)	
	M 7:00pm - 9:30pm	ONLINE	
	Tu 7:00pm - 9:30pm	ONLINE	Discussion

PLCY688R **Topics in Public Policy; Public Finance and Budgeting**

Credits: 2 Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Juan Martinez Guzman	Seats (Total: 10)	
	Tu 1:30pm - 4:00pm	ONLINE	
0201	Thomas Spreen	Seats (Total: 10)	
	W 7:00pm - 9:30pm	ONLINE	

PLCY689A **Public Policy Topics; Acquisitions: Concepts and Management**

Credits: 3 Grading Method: Regular, Audit

Special Topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	William Lucyshyn	Seats (Total: 20)	
	W 4:15pm - 6:45pm	ONLINE	

PLCY689E **Public Policy Topics; Program Evaluation and Cost-Benefit Analysis**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Special Topics in Public Policy.

0101	Susan Parker	Seats (Total: 25)
	Th 9:15am - 11:45am	ONLINE

PLCY689J **Public Policy Topics; Food Economics and Health**

Credits: 3 Grading Method: Regular, Audit

Special Topics in Public Policy.

Restricted to PLCY majors or instructor permission.

0101	Alok Bhargava	Seats (Total: 20)
	W 1:30pm - 4:00pm	ONLINE

PLCY689Q **Public Policy Topics; Quantitative Methods for Evidence-based Policies**

Credits: 3 Grading Method: Regular, Audit

Special Topics in Public Policy.

0101	Alok Bhargava	Seats (Total: 20)
	W 9:15am - 11:45am	ONLINE

PLCY689Z **Public Policy Topics; Strategic Management for NonProfit and Public Organizations**

Credits: 3 Grading Method: Regular, Audit

Special Topics in Public Policy.

Restricted to PLCY majors or instructor permission.

0101	Robert Sheehan	Seats (Total: 30)
	W 7:00pm - 9:30pm	ONLINE

PLCY692 **Leadership Principles and Practices**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY692 or PUAF692. Formerly: PUAF692.

This course will introduce leadership principles and practices to students by focussing on the theory of leadership, different leadership themes and skills, and discussions with practitioners.

Contact department for information to register for this course.

PLCY698A **Selected Topics in Public Affairs; Poverty Measurement and Alleviation**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

For PLCY majors only or permission of department.

0101	Douglas Call, Douglas Besharov	Seats (Total: 30)
	M 4:15pm - 6:45pm	ONLINE

PLCY698T **Selected Topics in Public Affairs; Managing Across Sectors**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

Restricted to PLCY majors or instructor permission.

0101	Elizabeth Duke	Seats (Total: 20)
	M 9:15am - 11:45am	ONLINE

PLCY699D **Selected Topics Public Policy; Examining Social Identity & Pluralism in Public Policy**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

Understanding how groups and individuals develop and coexist in society is an essential part of public policy. Using the classroom as a laboratory, students will explore identity development and how the intersections of race, class, gender, sexual orientation, and other identities shape perceptions that inform decision-making and policy development. From historical scholars to current day movement leaders, this course equips students with tools necessary to critically analyze pluralism, power, and identity; and the skills needed to shape meaningful and equitable public policy and working and civic environments for all.

0101	Nina Harris, Patricia Bory	Seats (Total: 24)
	W 1:30pm - 4:00pm	ONLINE

PLCY699F **Selected Topics Public Policy; Ethics of Public Administration**

Credits: 1-3 Grading Method: Regular, Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699G **Selected Topics Public Policy; Leadership in Groups and Organizations**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699O **Selected Topics Public Policy; 21st Century Policy Challenges**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699V **Selected Topics Public Policy; Homeland Security Policy**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

0101	David Mussington	Seats (Total: 25)
	Tu 4:15pm - 6:45pm	ONLINE

PLCY699W **Selected Topics Public Policy; Policy Engagement Project A**

Credits: 2 Grading Method: Regular, Audit

Special topics that arise in public policy.

Restricted to PLCY majors or permission of instructor.

0201	Douglas Call, Douglas Besharov M 7:00pm - 9:30pm	Seats (Total: 20) ONLINE
	Evaluation, performance measurement, and economic analysis projects (for studens in any specialization). Must have taken, or take in the next Spring Semester, PLCY689E "Program Evaluation and Cost-Benefit Analysis'.	
0311	Anand Patwardhan Th 1:30pm - 4:00pm	Seats (Total: 20) ONLINE
	Environmental and Energy projects.	
0401	Karin Johnston, Mark Young, Mark Troutman Th 1:30pm - 4:00pm	Seats (Total: 20) ONLINE
	International security and economic policy projects.	
0501	Matthew Regan, Philip Joyce Th 1:30pm - 4:00pm	Seats (Total: 16) ONLINE
	International development projects.	
0521	Angela Bies Tu 9:15am - 11:45am	Seats (Total: 20) ONLINE
	Evaluation, Management, Leadership Non-profit.	

PLCY699X **Selected Topics Public Policy; Policy Engagement Project A Extended**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

Restricted to PLCY majors or permission of instructor.

0201	Douglas Call, Douglas Besharov M 7:00pm - 9:30pm	Seats (Total: 20) ONLINE
	Evaluation, performance measurement, and economic analysis projects (for studens in any specialization). Must have taken, or take in the next Spring Semester, PLCY689E "Program Evaluation and Cost-Benefit Analysis'.	
0311	Anand Patwardhan Th 1:30pm - 4:00pm	Seats (Total: 20) ONLINE
	Environmental and Energy projects.	

0401	Karin Johnston, Mark Troutman, Mark Young Th 1:30pm - 4:00pm *International security and economic policy projects.*	Seats (Total: 20) ONLINE
0501	Matthew Regan, Philip Joyce Th 1:30pm - 4:00pm *International development projects.*	Seats (Total: 8) ONLINE
0521	Angela Bies Tu 9:15am - 11:45am *Evaluation, Management, Leadership Non-profit.*	Seats (Total: 20) ONLINE

PLCY700 **U.S. Trade: Policy and Politics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PUAF641, PUAF620, and PUAF640. Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY700 or PUAF700. Formerly: PUAF700.

Interplay between government and private interests in shaping official actions that affect international trade. Policy tools available to influence balance, magnitude, and composition of imports and exports. Evolution of executive, congressional and quasi-judicial government institutions under increased U.S. international trade exposure and trade deficit.

0101	William Reinsch, Susan Schwab, Uri Dadush Th 9:15am - 11:45am	Seats (Total: 22) ONLINE

PLCY711 **Public Management and Leadership**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY711 or PUAF711. Formerly: PUAF711.

Reviews the managerial, political, and ethical problems faced by public sector managers and leaders, including setting an organization's goals, obtaining and protecting a program mandate, designing a service delivery system and implementing a new program.

Contact department for information to register for this course.

PLCY720 **International Security Policy**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY720 or PUAF720. Formerly: PUAF720.

Reviews the principal features of international security as currently practiced. Traces the evolution of contemporary policy beginning with the initiation of nuclear weapons programs during World War II. Particular emphasis is given to experience of the United States and Russia, since the historical interaction between these two countries has disproportionately affected the international security conditions that all other countries now experience.

0101	Sara Kutchesfahani	Seats (Total: 25)
	M 9:15am - 11:45am	ONLINE

PLCY724 **Problems of Global Security**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY724 or PUAF724. Formerly: PUAF698W and PUAF724.

Explores the international security implications of globalization, presenting evidence indicating that altered circumstances will eventually induce a major redesign of prevailing security arrangements. Includes three segments: 1) a review of the principal problems that have been the focus of established security policy and would be the context for any major adjustment of policy; 2) an assessment of relationships with the major countries where traditional problems are most acutely present; and 3) a review of the organizing principles that can be expected to emerge in the new situation.

Contact department for information to register for this course.

PLCY735 **Health Policy**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: PLCY735 or PUAF735. Formerly: PUAF735.

Analyzes the origins, history, status, and future of health care as problems in political and economic theory and as puzzles in policy formation. Considers current American reform controversies in the light of several disciplines and in comparison to foreign experiences and structures.

0101	Robert Sprinkle	Seats (Total: 25)
	Th 4:15pm - 6:45pm	ONLINE

PLCY741 **Global Environmental Problems**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY741 or PUAF741. Formerly: PUAF741.

Suitability of analytic tools for examining global environmental problems, human overpopulation, land abuse, ozone depletion, climate change, acid rain, loss of biological diversity, the scarcity of food, fresh water, energy and nonfuel mineral resources, and health hazards of pollutants toxic metals and radiation.

0101	Anand Patwardhan	Seats (Total: 40)
	Th 4:15pm - 6:45pm	ONLINE

PLCY744 **Environment and Development**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: PLCY744 or PUAF744. Formerly: PUAF744.

Analyzes sustainable development and its conflicting interpretations. The dominant view, as expressed in the World Bank's 1992 World Development Report, is studied, along with some critical responses. Further readings on issues of population, consumption and development indicators.

0101	Thomas Hilde	Seats (Total: 20)
	W 7:00pm - 9:30pm	ONLINE

PLCY753 **Advanced Negotiations**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PUAF752. Credit only granted for: PUAF698C, PUAF753 or PLCY753. Formerly: PUAF698C and PUAF753.

Deepens the student's negotiation and leadership skills for managing differences between individuals and groups. Cover conflict, escalation, dealing with intractable conflicts, sustaining agreements in inter-group conflicts, and the effects of trauma on negotiations.

Contact department for information to register for this course.

PLCY780 **The American Foreign Policy-Making Process**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY780 or PUAF780. Formerly: PUAF780.

Survey and analysis of the governmental institutions and processes which shape U.S. global engagement on national security and international economic issues. Particular emphasis is given to executive-congressional relations and the broader domestic roots of foreign policy.

0101	Aaron Mannes	Seats (Total: 25)
	Th 4:15pm - 6:45pm	ONLINE

PLCY783 **Development and Foreign Aid**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY783 or PUAF783. Formerly: PUAF698Q and PUAF783.

Examines the empirical, conceptual, and ethical dimensions of international development policies and U.S. foreign aid. What is the present character of development in poor countries/regions? How should development be conceived? What development strategies are best? What is and should be the purpose of U.S. foreign aide and development assistance?

0101	Margaret Brindle	Seats (Total: 20)
	Tu 7:00pm - 9:30pm	ONLINE

PLCY798A **Readings in Public Policy**

Credits: 1-3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Contact department for information to register for this course.

PLCY798B **Readings in Public Policy**

Credits: 1-3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Contact department for information to register for this course.

PLCY798M **Readings in Public Policy; Arms Control and Non-Proliferation Policy**

Credits: 3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Restricted to PLCY majors or permission of instructor

0101	Nancy Gallagher	Seats (Total: 20)
	Tu 1:30pm - 4:00pm	ONLINE

PLCY798N **Readings in Public Policy; Energy Economics**

Credits: 3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Restriction: Must be in a major in PUAF-School of Public Policy; or permission of PUAF-School of Public Policy.

0101	Yueming Qiu	Seats (Total: 25)
	M 1:30pm - 4:00pm	ONLINE

PLCY798Y **Readings in Public Policy; Nonprofit Management and Leadership**

Credits: 3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Restriction: PLCY major or permission of instructor.

0101	Joannie Tremblay-Boire	Seats (Total: 10)
	Th 7:00pm - 9:30pm	ONLINE

PLCY798Z **Readings in Public Policy; Qualitative Research Methods and Public Policy**

Credits: 3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Restricted to PLCY majors or instructor permission.

0101	Peter Reuter	Seats (Total: 20)
	M 4:15pm - 6:45pm	ONLINE

PLCY898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PLCY899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

PLSC Plant Sciences Fall 2020

PLSC101 **Introductory Crop Science**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: LL General Education: DSNL

Major crop plants including: anatomy, physiology, morphology, history, use, adaptation, culture, improvement and economic importance.

Students must pay a $25.00 laboratory materials fee.

0101	Bill Phillips	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	
	F 10:00am - 10:50am	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0102	Bill Phillips	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	
	F 10:00am - 10:50am	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0103	Bill Phillips	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	
	F 10:00am - 10:50am	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0104	Bill Phillips	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	
	F 10:00am - 10:50am	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

PLSC115 **How Safe is Your Salad? The Microbiological Safety of Fresh produce**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS General Education: DSNS, SCIS

Recommended: PLSC100, PLSC101, or BSCI105; or (BSCI170 and BSCI171).

As food is produced in larger quantities and made to travel longer distances, keeping our food safe in this day and age is an ever growing challenge. This course will focus on the question of what it takes to grow and maintain safe fruits and vegetables, as food travels along the path from the farm to your fork. Food safety of fresh produce will be discussed from the public health, agricultural, economical and policy perspectives.

0101	Shirley Micallef	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
0102	Shirley Micallef	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion

PLSC125 **Feeding Ten Billion by 2050: Food Security and Crop Protection**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS, SCIS

A big question concerning global food security is "how can we feed 10 billion people in 2050?" This course will stimulate creative thinking about possible solutions particularly from the crop production perspective. The instructors will introduce the concept of food security and different dimensions of this complex issue, identify major constraints to food security, and discuss scientific approaches that may be used to meet the grand challenge. Emphasis will be placed on topical and controversial issues such as the impact of climate change, biofuel production and GM crops on food security, and novel strategies that can improve food security.

0101	James Culver, Shunyuan Xiao	Seats (Total: 53)	
	Tu 9:30am - 10:45am	ONLINE	
	Th 9:30am - 10:45am	ONLINE	Discussion
0102	James Culver, Shunyuan Xiao	Seats (Total: 52)	
	Tu 9:30am - 10:45am	ONLINE	
	Th 9:30am - 10:45am	ONLINE	Discussion

PLSC130 **Did Yeast Create Civilization?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Recommended: CHEM103, CHEM131, CHEM135, or CHEM146. Cross-listed with: AGST130. Credit only granted for: AGST130 or PLSC130.

Fermented foods have played a major role in the transition from nomadic to settled agrarian societies, the establishment of social and religious customs, the expansion of empires, and modern economies. To what extent are our past and current attitudes towards fermented foods rooted in historical and cultural imprints? Explore the central role of fermentation in human history and culture, the basic microbiological processes underlying fermentation processes, and the processes used to produce and distribute fermented foods. Find out how the fruits, grains, and dairy products used to produce fermented foods are grown and selected. Students will learn about the development and modern use of fermented dairy products, pickles, bread, tea, chocolate, wine, beer, distilled liquors, and pharmaceutical/manufactured products.

There will be a required live/synchronous meeting on the first week of classes via Zoom on Monday 8/31/2020 at 6pm. If there is a time change to the meeting time, this will be communicated via ELMS.

0101	Angus Murphy, Wendy Peer	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	

PLSC201 **Plant Structure and Function**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC100; or PLSC101. And CHEM103; or CHEM131. And CHEM132.

The relationship between plant structure and function and how the environment influences changes in the physiology to control higher plant growth and development are studied.

0101	Jianhua Zhu	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	W 10:00am - 10:50am	ONLINE	
	M 3:30pm - 6:15pm	RGC 1101	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/ online class meeting. Please see instructor for details.		
0102	Jianhua Zhu	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	W 10:00am - 10:50am	ONLINE	
	W 3:30pm - 6:15pm	RGC 1101	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/ online class meeting. Please see instructor for details.		

PLSC203 **Plants, Genes and Biotechnology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS General Education: DSNS

Prerequisite: BSCI103 or BSCI105; or (BSCI170 and BSCI171).

An overview of the history, genetics, and reproductive mechanisms for agronomic and horticultural plants that examines mechanisms of genetic improvement ranging from traditional plant breeding to tissue culture and genetic engineering. Social and political issues such as germplasm preservation and international intellectual property rights will also be discussed.

0101	Vijay Tiwari	Seats (Total: 23)	
	TuTh 2:00pm - 3:15pm	ONLINE	

PLSC205 **Introduction to Turf Science and Management**

Credits: 4 Grading Method: Regular General Education: DSNL

Credit only granted for: PLSC205 or PLSC305. Formerly: PLSC305.

Principals of turf science and culture with emphasis on turfgrass anatomy, morphology, and physiology. The role of cultural interventions in achieving specific aesthetic and functional objectives is examined for multiple turf uses. Pest problems typically encountered in turfgrass management are also covered.

0101	Mark Carroll	Seats (Total: 10)	
	MWF 1:00pm - 1:50pm	ONLINE	
	Tu 3:00pm - 5:00pm	Location: TBA	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/ online class meeting. Please see instructor for details.		

PLSC253 **Woody Plants for Mid-Atlantic Landscapes I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC100.

A field and laboratory study of trees, shrubs, and vines used in ornamental plantings. Major emphasis is placed on native deciduous plant materials.

0101	Karen Petroff	Seats (Total: 24)	
	WF 12:00pm - 12:50pm	ONLINE	
	F 1:00pm - 3:50pm	ESJ 1215	Lab
0102	Karen Petroff	Seats (Total: 24)	
	WF 12:00pm - 12:50pm	ONLINE	
	F 1:00pm - 3:50pm	ESJ 1202	Lab

PLSC389 **Internship**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit will be given for practical work carried out at one or more horticultural, agronomic, landscape industries, botanical gardens, or arboreta under formally arranged internships.

There will be two required real-time sessions, time to be determined. Prerequisite: Permission of AGNR-Plant Science & Landscape Architecture department. Restriction: Junior standing or higher. And must be in Plant Sciences program; or must be in Landscape Architecture program. Credit will be given for practical work carried out at one or more horticultural, agronomic, landscape industries, botanical gardens, or arboreta under formally arranged internships.

0101	Mark Carroll	Seats (Total: 20)
	Meets July 8, 2020 - November 18, 2020	
	Class time/details on ELMs	ONLINE

PLSC399 **Special Problems in Plant Science**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research projects in Plant Science including field, greenhouse, laboratory, studio and/or library studies. Research is conducted under the direction of a faculty member.

Contact department for information to register for this course.

PLSC402 **Sports Turf Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC305 and PLSC401.

Sports turf management, including design, construction, soil modification, soil cultural techniques, pesticide use, fertilization, and specialized equipment.

0101	Geoffrey Rinehart	Seats (Total: 10)
	Tu 8:00am - 9:15am	ONLINE
	Th 8:00am - 9:15am	PBR 1102

PLSC404 **Plant and fungal Metabolism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI170 and BSCI171; or PLSC201. And CHEM231 and CHEM232; or CHEM237; or permission of AGNR-Plant Science & Landscape Architecture department.

An introduction to biochemistry and metabolism in plants and fungi, covering the biosynthesis of compartments in plant and fungal cells with biological molecules such as nucleic acids, amino acids and lipids. Energy flow processes such as photosynthesis, carbohydrate metabolism and respiration, are covered in the course. The integration of different pathways in plant development and responses to environmental stresses will be discussed.

0101	Yiping Qi	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ONLINE

PLSC405 **Agroecology**

Credits: 3 Grading Method: Regular

Prerequisite: At least one course in ecology; or permission of instructor. Recommended: BSCI361 or PLSC471; or any BSCI or ENST ecology course. Credit only granted for: PLSC405 or PLSC605. Additional information: Class will be held on campus, with two day-long field trips to local farms.

How can we balance the multiple, and often competing objectives of sustainable agricultural intensification to promote both agricultural productivity and human wellbeing? The answer to this question requires a transdisciplinary, agroecological perspective. Agroecology is the integrative study of the ecology of the entire food system, encompassing ecological, economic and social dimensions. This course is designed to introduce various topics in agroecology (e.g. organic agriculture, biodiversity, the Farm Bill). We will take an ecosystems approach to the study of agriculture that will enable students to analyze the environmental, social, and economic interconnections within various types of agricultural systems locally and globally.

0101	Kate Tully	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ONLINE

PLSC420 **Principles of Plant Pathology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, CHEM132, and PLSC201; or students who have taken courses with comparable content may contact the department.

An introduction to the causal agents, nature and management of plant diseases with particular attention paid to economically important diseases of horticultural and agronomic crops.

0101	Nidhi Rawat	Seats (Total: 18)	
	TuTh 1:00pm - 2:15pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

0102	Nidhi Rawat	Seats (Total: 18)	
	TuTh 1:00pm - 2:15pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

PLSC433 **Technology of Fruit and Vegetable Production**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC201, PLSC271, and ENST200; or students who have taken courses with comparable content may contact the department. Restriction: Junior standing or higher.

A critical analysis of research work and application of the principles of plant physiology, chemistry and botany to practical problems in the commercial production of fruit and vegetable crops.

0101	Diana Cochran	Seats (Total: 10)	
	M 11:00am - 12:15pm	ONLINE	
	W 11:00am - 12:15pm	PLS 1140	
	Class time/details on ELMs	ONLINE	
	W 1:00pm - 4:50pm	PLS 0123	Lab
	Class time/details on ELMs	ONLINE	Lab
	Alternating face-to-face/ online class meeting. Please see instructor for details.		

PLSC453 **Weed Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Weed identification, ecology, and control (cultural, mechanical, biological, and chemical methods).

0101	Bill Phillips	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	
	Th 9:30am - 10:45am	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

PLSC489L **Special Topics in Plant Science; Scientists Teaching and Translating Science**

Credits: 2 Grading Method: Regular

A lecture and or laboratory series organized to study a selected phase of Plant Science not covered by existing courses. Credit according to time scheduled and organization of the course.

Explore methods in pedagogy and andragogy to facilitate science learning Development of teaching philosophy, outreach teaching skills and review of current literature on instruction in science fields.

0101	Melissa Welsh Class time/details on ELMs	Seats (Total: 30) ONLINE

PLSC608 **Research Methods**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

An overview of research methods and applications related to plant sciences. Topics covered include current research advances, professional conduct and ethics, and preparation of grant proposals, manuscripts, and scientific presentations.

Prerequisite: permission of department. Repeatable to 6 credits if content differs. Credit will be granted for only one of the following: AGRO608, NRSC608, or PLSC608. Formerly NRSC608.

0101	Angus Murphy M 3:30pm - 5:30pm	Seats (Total: 20) ONLINE

PLSC608T **Research Methods; Supervised Teaching**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

An overview of research methods and applications related to plant sciences. Topics covered include current research advances, professional conduct and ethics, and preparation of grant proposals, manuscripts, and scientific presentations.

Prerequisite: permission of department.

0103	Angus Murphy Contact instructor or department for details.	Seats (Total: 5)
0104	Mark Carroll Contact instructor or department for details.	Seats (Total: 5)
6201	Jianhua Zhu Contact instructor or department for details.	Seats (Total: 5)

PLSC619 **Seminars in Plant Science and Landscape Architecture**

Credits: 1 Grading Method: Regular, Audit

Enhancement of student learning and enrichment of student curriculum for the Plant Science Graduate Program through a combination of research seminar attendance and post-seminar discussion. Research seminars will be given by prominent scientists in the field of plant sciences and post-seminar discussions will be facilitated by the instructor along with student discussion leaders.

0101	Melissa Welsh, Nicole Fiorellino	Seats (Total: 10)	
	M 12:00pm - 12:50pm	ONLINE	
	M 1:00pm - 1:50pm	ONLINE	Discussion

PLSC799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

PLSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PLSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

PORT Portuguese Fall 2020

PORT104 **Intensive Elementary Portuguese**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: PORT103 or PORT104. Formerly: PORT104.

Covers speaking, reading, writing, listening, and culture of Portuguese-speaking world.

0101	Adonis De Carvalho Borges	Seats (Total: 25)	
	TuTh 11:00am - 12:15pm	ONLINE	
	W 11:00am - 11:50am	ONLINE	

PORT205 **Intermediate Reading and Conversation in Portuguese I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: PORT204; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Development of spoken Portuguese at intermediate level based on written assignments and exams on readings in a variety of genres.

0101	Thayse Lima TuTh 11:00am - 12:15pm	Seats (Total: 15) ONLINE

PORT228D **Selected Topics in Latin American Literature and Society; Environmental Crisis in Latin America**

Credits: 3 Grading Method: Regular, Pass-Fail

Variable cultural studies topics on literature and society in contemporary Latin America. Taught in English.

Cross-listed with LASC248B. Credit granted for PORT228D or LASC248B. How does the expansion of global capitalism impact environmental crises in Latin America? How have Latin American artists and activists re-imagined our relationship to the natural world? How local grass-roots organizations in Latin America and international NGO's fight for environmental justice? This course draws on a diverse range of cultural production including, theroy, documentaries, film, and fiction to respond to these questions. Students will also engage directly with international environmental organizations in the DC area and Latin American grass-roots leadership.

0101	Thayse Lima TuTh 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

PORT234 **Issues in Latin American Studies I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO, D General Education: DSHS, DSHU, DVUP

Cross-listed with SPAN234, LASC234. Credit only granted for: LASC234, PORT234, or SPAN234.

Interdisciplinary study of major issues in Latin America and the Caribbean, including Latin America's cultural mosaic, migration and urbanization. Democratization and the role of religions. Taught in English.

0101	Sarah Dowman TuTh 3:30pm - 4:45pm	Seats (Total: 30) ONLINE
0201	Sarah Dowman TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE

PORT386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department; and junior standing or higher.

Contact department for information to register for this course.

PORT399 **Independent Study in Portuguese**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Specific readings in literature under the supervision of a faculty member of the department.

Contact department for information to register for this course.

PORT699 **Independent Study of Portuguese**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit, Sat-Fail

This course is designed to provide graduate students an opportunity to pursue independent study under the supervision of a member of the department.

Contact department for information to register for this course.

PSYC Psychology Fall 2020

The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to contact the instructor, prior to course enrollment, to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required and what alternatives, if any, are available. The Department of Psychology enforces course prerequisites. Students who do not meet the course prerequisites will be administratively dropped from the course.

PSYC100 **Introduction to Psychology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

CORE: SB

General Education: DSHS, DSNS

A basic introductory course, intended to bring the student into contact with the major problems confronting psychology and the more important attempts at their solution.

Discussion sections do not meet until after first lecture. Research requirement: may involve participation in research.

Click here for more course information.

0101	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0102	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0103	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0104	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0105	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0106	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0107	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0108	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion

0109	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0110	Benjamin Jones	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0201	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 9:00am - 9:50am	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0202	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0203	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 11:00am - 11:50am	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0204	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 12:00pm - 12:50pm	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0205	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 3:00pm - 3:50pm	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0206	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 9:00am - 9:50am	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion

0207	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 10:00am - 10:50am	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0208	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 11:00am - 11:50am	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0209	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 12:00pm - 12:50pm	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0210	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	ONLINE	
	F 3:00pm - 3:50pm	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
FC01	Scott Roberts	Seats (Total: 40)	
	MW 6:00pm - 7:15pm	ONLINE	
	Restricted to students in Freshmen Connection.		
FC02	Scott Roberts	Seats (Total: 40)	
	MW 7:30pm - 8:45pm	ONLINE	
	Restricted to students in Freshman Connection.		
FC03	Dirk Parham	Seats (Total: 40)	
	TuTh 4:30pm - 5:45pm	ONLINE	
	Restricted to students in Freshmen Connection.		

PSYC123 **The Psychology of Getting Hired**

Credits: 1 Grading Method: Regular

Restriction: Must not be in a Robert H. Smith School of Business degree program. Additional information: Cannot be used in place of BMGT367 toward a degree program in the Robert H. Smith School of Business.

Designed to introduce students to the science behind the hiring process and to prepare individuals with the academic and practical training required. Together we will explore psychological principles that influence the selection process and how individuals can apply them for the competitive edge that makes others Fear the Turtle!

0101	Erica Ely	Seats (Total: 100)	
	Class time/details on ELMs	ONLINE	
0201	Erica Ely	Seats (Total: 100)	
	Class time/details on ELMs	ONLINE	

PSYC200 **Statistical Methods in Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSAR

Prerequisite: PSYC100. And 1 course with a minimum grade of C- from (MATH107, MATH111, MATH120, MATH130, MATH136, MATH140, STAT100); or must have completed MATH220 with a minimum grade of C-. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

A basic introduction to quantitative methods used in psychological research.

Restricted to PSYC, ENSP, BSCI, and NEUR majors.

Click here for sample course syllabus.

0101	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0102	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0103	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion

0104	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0105	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0201	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0202	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0203	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0204	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0205	Tracy Tomlinson	Seats (Total: 28)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Class time/details on ELMs	ONLINE	Discussion

PSYC202 **Introduction to Neuroscience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI170 and BSCI171. Cross-listed with: NEUR200. Credit only granted for: PSYC309U, NEUR200, PSYC202 or PSYC301. Formerly: PSYC309U.

In an evolutionary sense, the job of the nervous system is to produce, control, and coordinate behaviors that help an animal survive and reproduce. Neuroscience is the study of how the nervous system does that. Provides a broad introduction to neuroscience, always keeping the behavioral consequences in view.

0101	David Yager MW 12:30pm - 1:45pm	Seats (Total: 175) ONLINE	

PSYC221 **Social Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, DSSP

Prerequisite: PSYC100.

The influence of social factors on the individual and on interpersonal behavior. Includes topics such as conformity, attitude change, person perception, interpersonal attraction, and group behavior.

Click here for sample course syllabus.

0101	Colleen Kase MWF 1:00pm - 1:50pm	Seats (Total: 150) ONLINE	
0201	Dylan Selterman TuTh 11:00am - 12:15pm	Seats (Total: 150) ONLINE	
FCB1	Dylan Selterman Tu 4:30pm - 5:45pm F 11:30am - 12:45pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 40) ONLINE ONLINE ONLINE	 Discussion Discussion

PSYC232 **Psychology of Racism**

Credits: 3 | Grading Method: Regular

Restriction: Limited to Psychology majors; if spaces remain in the course, will open to all majors.

This course will explore the causes, correlates, and consequences of racial prejudice in the United States and other national contexts. Using lecture, readings, and discussion, we will examine the psychological theory and research on what processes underlie and motivate racial prejudice; how racial prejudice is experienced by its targets; how racial prejudice pervades our culture and social institutions; and how racial prejudice is learned, maintained, and ultimately changed.

Restriction: Must be a student in the Pscyhology Major (20010, 2001S). This course will explore the causes, correlates, and consequences of racial prejudice in the United States and other national contexts. Through lecture, reading, and discussion, we will examine the psychological theory and research on what processes underlie and motivate racial prejudice; how racial prejudice is experienced by its targets; how racial prejudice pervades our culture and social institutions; and how racial prejudice is learned, maintained, and ultimately changed.

0101	Linda Zou	Seats (Total: 20)
	MW 3:00pm - 4:15pm	ONLINE

PSYC289D **Living the Good Life: The Psychology of Happiness**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB	General Education: DSHS, SCIS

Credit only granted for: PSYC234 or PSYC289D. Formerly: PSYC289D.

What are the secrets to living a happy life? Can happiness be found within the context of war, a depressed economy, violence and other major stressors? Are some people born happier than others? This course will teach you the scientific process that psychologists use to study happiness (and related emotional variables) and give you the opportunity to practice applying that process in a number of ways. You will learn how we (a) gather and critically evaluate research findings in the existing literature, (b) integrate those findings into coherent and testable theories, (c) design and conduct valid scientific research that tests those theories and extends our knowledge, and (d) effectively communicate our theories and findings to a wide range of audiences. The result of the process is a more accurate and objective understanding happiness, and that is what prepares you to apply your scientific understanding to explain and influence a wide range of outcomes.

0101	Dylan Selterman	Seats (Total: 135)
	TuTh 2:00pm - 3:15pm	ONLINE

PSYC300 **Research Methods in Psychology Laboratory**

Credits: 4	Grading Method: Regular, Pass-Fail, Audit	General Education: DSSP

Prerequisite: PSYC200. Restriction: Must be in Psychology program. Credit only granted for: PSYC300 or PSYC309R. Formerly: PSYC309R.

A general introduction and overview to the fundamental theoretical, conceptual, and practical issues in psychological research in both the laboratory and the field.

Restricted to PSYC majors only.

0101	Edward Bernat MW 11:00am - 11:50am Th 12:00pm - 1:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0102	Edward Bernat MW 11:00am - 11:50am Th 10:00am - 11:50am	Seats (Total: 16) ONLINE ONLINE	 Discussion
0103	Edward Bernat MW 11:00am - 11:50am Th 2:00pm - 3:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0104	Edward Bernat MW 11:00am - 11:50am F 10:00am - 11:50am	Seats (Total: 16) ONLINE ONLINE	 Discussion
0105	Edward Bernat MW 11:00am - 11:50am Th 12:00pm - 1:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0106	Edward Bernat MW 11:00am - 11:50am F 2:00pm - 3:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0201	Edward Bernat MW 1:00pm - 1:50pm Th 4:00pm - 5:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0202	Edward Bernat MW 1:00pm - 1:50pm F 10:00am - 11:50am	Seats (Total: 16) ONLINE ONLINE	 Discussion
0203	Edward Bernat MW 1:00pm - 1:50pm F 12:00pm - 1:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0204	Edward Bernat MW 1:00pm - 1:50pm F 2:00pm - 3:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion

0205	Edward Bernat MW 1:00pm - 1:50pm W 4:00pm - 5:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0206	Edward Bernat MW 1:00pm - 1:50pm F 12:00pm - 1:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0301	Amanda Chicoli MW 10:00am - 10:50am M 4:00pm - 5:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0302	Amanda Chicoli MW 10:00am - 10:50am Tu 4:00pm - 5:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0303	Amanda Chicoli MW 10:00am - 10:50am W 4:00pm - 5:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion
0304	Amanda Chicoli MW 10:00am - 10:50am Th 4:00pm - 5:50pm	Seats (Total: 16) ONLINE ONLINE	 Discussion

PSYC301 **Biological Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS

Prerequisite: BSCI170 and BSCI171; or equivalent.

Biological Psychology is the study of the physiological basis of behavior. In this course, we will first cover the basic principles of brain organization and neural transmission. We will then introduce traditional and modern research techniques in the field of behavioral neuroscience. The last portion of the course focuses on specific topics including psychopharmacology, learning and memory, emotion, stress, drug of abuse, neurological disorders (e.g., Alzheimer's disease and Parkinson's disease) and schizophrenia.

Restricted to PSYC majors only.

Click here for sample course syllabus.

Contact department for information to register for this course.

PSYC302 **Fundamentals of Learning and Behavior**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100. And BSCI170 and BSCI171; or BSCI105. Restriction: Restricted to psychology majors during the registration period. All other majors will be placed on a hold file. Credit only granted for: PSYC309F or PSYC302. Formerly: PSYC309F.

Overview of the fundamental types of learning that occur without formal instruction. The course covers fundamentals of classical and instrumental conditioning as studied in a variety of species in addition to more modern theories of learning. We will then explore how these principles influence diverse processes such as memory, attention, extinction, categorization, motivation, and in some cases, how they are implemented in the brain and disrupted in disease.

Contact department for information to register for this course.

PSYC303 **Professional Development for Psychology Majors**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC123; or permission from the instructor with a completed resume. Restriction: Must have earned a minimum of 60 credits; and must be in the Psychology major.

An investigation of various career and graduate school opportunities available to psychology majors. Students will learn about a wide range of career fields, will learn how to utilize available resources to pursue career goals, and will take steps to advance their professional identity and development.

0101	Alexis Foley	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

PSYC309F **Special Topics in Psychology; PREP for Next Steps**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Topics of current interest which represent extensions of or additions to topics covered in more general topical courses.

Restricted to students in the PREP: Psychology Research Empowerment Program.

0101	Nazish Salahuddin	Seats (Total: 20)
	W 1:00pm - 1:50pm	ONLINE

PSYC318D **Community Interventions: Theory and Research; Community Interventions: Domestic Violence**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Survey and critical examination of a problem in the community and related interventions. Analysis of theory and research relevant to the problem. Historical and current trends discussed. A student who has completed PSYC309 must have permission of the department in order to register for PSYC318.

Theories and researchrelated to domestic violence and interventions with abused womenwill bestudied, and students will think critically regarding ethical andmulticultural issues related to domestic violence. Community resources and strategies for ending domestic violence in the United States will be discussed. Jointly offered with WMST498A. Restricted to PSYC majors only.

0101	Karen O'Brien	Seats (Total: 35)
	MW 8:30am - 9:45am	ONLINE

PSYC330 **Child Psychopathology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100. Restriction: Must be in Psychology program. Credit only granted for: PSYC309B or PSYC330. Formerly: PSYC309B.

Etiology, diagnosis, prevention and treatment of emotional disorders of childhood and adolescence.

Restricted to PSYC majors only.

0101	Andrea Chronis-Tuscano	Seats (Total: 100)
	TuTh 11:00am - 12:15pm	ONLINE

PSYC332 **Psychology of Human Sexuality**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100.

A survey of historical and contemporary psychological views on a wide variety of sexual behaviors; theory and research bearing on the relationship between life span psychological development, psychological functioning, interpersonal processes and sexual behaviors; political and social issues involved in current sexual norms and practices.

Contact department for information to register for this course.

PSYC336 **Psychology of Women**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHS

Prerequisite: PSYC100. Cross-listed with: WGSS336. Credit only granted for: PSYC336, WMST336 or WGSS 336. Formerly: WMST336.

A study of the biology, life span development, socialization, personality, mental health, and special issues of women.

Students will be expected to meet face-to-face during class time to complete small group work on 5-6 Fridays during the semester.

Click here for sample course syllabus.

0101	Monica Kearney	Seats (Total: 110)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

PSYC338D **Special Topics in Study Abroad III; Developmental Disorders**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PSYC338L **Special Topics in Study Abroad III; Dynamic Project Leadership**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PSYC338N **Special Topics in Study Abroad III; Neuroscience of Fear**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PSYC338P **Special Topics in Study Abroad III; Positive Psychology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PSYC341 **Introduction to Memory and Cognition**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC200 and PSYC300.

An introduction to the basic concepts of cognitive psychology, the scientific study of mental processes. Topics will include perception, attention, memory, reasoning, and language, with an emphasis on how findings from cognitive psychology can inform real-life thinking (e.g., memory strategies for studying, pitfalls of multitasking, and how/why our memories can fail us).

Restricted to PSYC majors only.

Click here for sample course syllabus.

0101	Michael Dougherty TuTh 12:30pm - 1:45pm	Seats (Total: 110) ONLINE

PSYC344 **Health Psychology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100; or permission of instructor. Restriction: Must be in the Psychology program; or must be in a major within the School of Public Health; or permission of instructor. Credit only granted for: PSYC489U or PSYC344. Formerly: PSYC489U.

An examination of how psychological, biological, and social factors impact physical health and well-being. Students will use the biopsychosocial model to analyze topics including stress, health disparities, pain, addiction, disease states (e.g., cardiovascular disease, diabetes, cancer), and primary prevention.

0101	Kristen Hamilton Class time/details on ELMs	Seats (Total: 75) ONLINE
ESG1	Kristen Hamilton Class time/details on ELMs *Restricted to Shady Grove students in the Public Health Science major.*	Seats (Total: 35) ONLINE

PSYC353 **Adult Psychopathology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100. Restriction: Must be in Psychology program.

The nature, diagnosis, etiology, and treatment of mental disorders.

Restricted to undergraduate PSYC students only.

Click here for sample course syllabus.

0101	Christopher Seitz-Brown	Seats (Total: 117)
	TuTh 3:30pm - 4:45pm	ONLINE

PSYC354 **Multicultural Psychology in the U.S.**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | , D | General Education: DSHS

Prerequisite: PSYC100.

What are the psychological implications of racism, sexism, homophobia and other structures of inequality in the United States? How do socio-cultural privilege and oppression influence individual and group thoughts, feelings, and behaviors? This course will take a current events focus to understanding multicultural and social justice issues in psychology with an emphasis on self-reflection, mental health, cross-cultural communication, and strategies for social change.

Click here for sample course syllabus.

0101	Monica Kearney	Seats (Total: 150)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

PSYC355 **Developmental Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100.

Survey of research and theory of psychological development from conception through childhood, stressing physiological, conceptual and behavioral changes, and the social and biological context in which individuals develop.

Restricted to undergraduate PSYC students only.

Click here for sample course syllabus.

0101	Tracy Riggins	Seats (Total: 150)
	Class time/details on ELMs	ONLINE

PSYC361 **Survey of Industrial and Organizational Psychology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100.

A general survey of the field of industrial organizational psychology including such topics as organizational entry (recruitment, selection, training, socialization); organizational psychology (motivation, leadership, job attitudes); and productivity in the work place (performance appraisal, absenteeism, turnover). The role that the larger environment plays in influencing work behaviors and work attitudes.

Restricted to PSYC majors only.

Click here for sample course syllabus.

0101	James Grand	Seats (Total: 75)
	TuTh 9:30am - 10:45am	ONLINE

PSYC389 **Experiential Learning**

(Perm req)

Credits: 1-6

Grading Method: Regular, Pass-Fail, Audit

Internship in psychology-related fields.

A course for undergraduate psychology majors to earn academic credit for an approved psychology-related internship experience. Information about the course may be obtained in BPS1107, or by contacting the instructor. Restricted to PSYC majors only.

0101	Steven Young	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

PSYC403 **Animal Behavior**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC301.

Reviews the theoretical framework underlying the study of animal behavior. The genetic, hormonal and physiological basis of behavior, and the relation to ecological and evolutionary processes will be discussed using examples that range from invertebrate animals to humans.

Restricted to PSYC majors only.

0101	Jens Herberholz	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	ONLINE

PSYC404 **Introduction to Behavioral Pharmacology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC301. Restriction: Must be in Psychology program.

Theoretical viewpoints on the interaction of drugs and behavior. Basic principles of pharmacology, the effects of drugs on various behaviors, experimental analysis of drug dependence and abuse, and neuropharmacology and behavior.

Contact department for information to register for this course.

PSYC407 **Behavioral Neurobiology Laboratory**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC300 and PSYC301; and permission of instructor. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits.

How does the nervous system control behavior? We will address this question using simple behavioral experiments combined, in some exercises, with microsurgery and electrode recordings in the nervous system. Concepts studied will include CNS plasticity, the role of proprioception in controlling movement, cortical processing and the myth multitasking, sensory resolution by measuring receptive field sizes, activity of simple neural circuits controlling escape from predators, and the effects of neuromodulators on aggression. Animals used are all invertebrates.

Permission required (contact professor, mroesch@umd.edu)

Click here for sample course syllabus.

0101	Matthew Roesch M 9:00am - 9:50am W 9:00am - 12:00pm	Seats (Total: 8) ONLINE ONLINE	 Lab
0201	Matthew Roesch M 9:00am - 9:50am F 9:00am - 12:00pm	Seats (Total: 8) ONLINE ONLINE	 Lab
0301	Matthew Roesch M 9:00am - 9:50am F 1:00pm - 4:00pm	Seats (Total: 8) ONLINE ONLINE	 Lab

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PSYC409 **Topics in Neurosciences Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Current research in neurosciences will be presented, read, and discussed. Emphasis will change each term.

For students in the neuroscience minor. Research presentations on selected topics in neuroscience. Review and discussion of background readings related to research presentations take place on alternate weeks. Restricted to students in the neuroscience minor.

0101	Amanda Chicoli	Seats (Total: 38)
	W 2:00pm - 3:50pm	ONLINE

PSYC411 **Introduction to Functional Magnetic Resonance Imaging**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC200, PSYC301, and PSYC300. Restriction: Must be in a major within BSOS-Psychology department. Credit only granted for: PSYC309N or PSYC411. Formerly: PSYC309N.

An introduction to functional magnetic resonance imaging (fMRI). Students will be taught about formulating testable hypotheses with fMRI, utilizing basic methods in fMRI studies, and understanding existing limitations of fMRI studies in the literature.

Restricted to PSYC majors only.

0101	Luiz Pessoa	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

PSYC414 **Science of Sleep and Biological Rhythms**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC301, PSYC202, or NEUR200; or permission of instructor. Restriction: Must be in a major within the BSOS-Psychology department; and restricted to psychology majors during the registration period.

Sleep is a powerful, inescapable, misunderstood, and mysterious presence in our lives. The course will begin with a review of the basics of sleep and biological rhythms with a focus on the underlying neurobiology. The bulk of the semester will be in-depth discussions of topics in sleep and circadian rhythms primarily chosen by the students. A few examples: narcolepsy, sleep in primitive cultures, lucid dreaming, racial and cultural differences in sleep and sleep disorders, the biology of sleep and circadian rhythms during adolescence, CNS control of dreaming, sleep and states of consciousness, sleeping to remember vs. sleeping to forget, legal ramifications of parasomnias, e.g. sleepwalking, and the relationships between sleep deprivation and obesity.

0101	David Yager	Seats (Total: 25)	
	MWF 9:00am - 9:50am	ONLINE	

PSYC417 **Data Science for Psychology and Neuroscience Majors**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC200 and PSYC300; and (MATH120, MATH130, or MATH140). Credit only granted for: PSYC489D or PSYC417. Formerly: PSYC489D.

A large number of industry and academic jobs require basic programming and data analysis skills. This class represents an introduction to both. Students will learn to program in R and will briefly be introduced to Python, the two most popular programming languages for data science. Common constructs shared by a variety of procedural programming languages will be emphasized. Basic statistics and probability theory will be reviewed from a computational perspective, and more advanced topics introduced. During the course, students will simulate toy data sets which they will then analyze knowing how the data came about, as well as work with real data. The class is highly hands-on with a large number of in-class lab and homework projects. Expect to work a lot and move quickly. Because of the hands-on nature of the class, the overall focus is more on application and execution rather than theory. However, some theory is covered at a high level so that students are aware of why they are doing something, rather than mindlessly writing code.

0101	Alec Solway	Seats (Total: 24)	
	MW 1:00pm - 3:00pm	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

PSYC420 **Experimental Psychology: Social Psychology Laboratory**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC300 and PSYC221. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits.

A laboratory course to provide a basic understanding of experimental method in social psychology and experience in conducting research on social processes.

Click here for sample course syllabus.

0101	Edward Lemay	Seats (Total: 13)	
	MW 11:00am - 11:50am	ONLINE	
	F 10:00am - 11:50am	ONLINE	Lab

0102	Edward Lemay	Seats (Total: 12)	
	MW 11:00am - 11:50am	ONLINE	
	F 12:00pm - 1:50pm	ONLINE	Lab

PSYC425 **Psychology and Law**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100, PSYC200, and PSYC300. Restriction: Must be in Psychology program. Credit only granted for: PSYC309K, PSYC325, or PSYC425. Formerly: PSYC309K.

An introduction to the intersection of psychology and the criminal justice sytem, known as the field of legal psychology. The material covered will span the course of the criminal justice process and examine each aspect from a psychological perspective beginning with profiling and moving on to eyewitness memory and judgements through perpetrator memories and interrogation techniques. These apsects will be evaluated with a research lens as well as an applied outlook.

0101	Tracy Tomlinson	Seats (Total: 30)	
	TuTh 12:30pm - 1:45pm	ONLINE	

PSYC432 **Counseling Psychology: Theories, Research, and Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC200.

Analysis of research and intervention strategies developed and used by counseling psychologists. Historical and current trends in content and methodology.

Restricted to undergraduate PSYC majors only. Students will be expected to meet face-to-face during class time to complete small group work on 5-6 Fridays during the semester.

Click here for sample course syllabus.

0101	Nazish Salahuddin	Seats (Total: 75)	
	MW 10:00am - 10:50am	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Note: Students will be expected to engage in asynchronous coursework Friday's during the semester.		

0201	Suzanne Friedman MW 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 75) ONLINE ONLINE	 Discussion
	Note: Students will be expected to engage in asynchronous coursework Friday's during the semester.		

PSYC433 **Basic Helping Skills: Research and Practice**

Credits: 4 Grading Method: Regular

Prerequisite: PSYC300. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits; and must not have completed or be concurrently enrolled in EDCP 310. Credit only granted for: EDCP210, EDCP310, or PSYC433.

Theories and research regarding effective helping relationships, with a focus on applications to counseling and psychotherapy. Students will practice helping skills with each other and will conduct research projects evaluating their helping skills. Students should be willing to talk about personal issues in class. Attendance in labs is mandatory and contributes to the course grade; thus, students should only enroll in a lab section that they will be able to attend consistently.

Restricted to undergraduate PSYC majors who have completed 85 credits.

Click here for sample course syllabus.

0101	Monica Kearney Class time/details on ELMs W 9:00am - 10:50am	Seats (Total: 12) ONLINE ONLINE	 Lab
0102	Monica Kearney Class time/details on ELMs W 11:00am - 12:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab
0103	Monica Kearney Class time/details on ELMs Th 4:00pm - 5:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab
0104	Monica Kearney Class time/details on ELMs W 3:00pm - 4:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab
0105	Monica Kearney Class time/details on ELMs Th 2:00pm - 3:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab

0106	Monica Kearney Class time/details on ELMs F 9:00am - 10:50am	Seats (Total: 12) ONLINE ONLINE	Lab
0107	Monica Kearney Class time/details on ELMs F 11:00am - 12:50pm	Seats (Total: 12) ONLINE ONLINE	Lab
0108	Monica Kearney Class time/details on ELMs F 1:00pm - 2:50pm	Seats (Total: 12) ONLINE ONLINE	Lab
0109	Monica Kearney Class time/details on ELMs F 1:00pm - 2:50pm	Seats (Total: 12) ONLINE ONLINE	Lab

PSYC435 **Theories of Personality and Psychotherapy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC200.

Major theories of personality and research methods and findings relevant to those theories.

Restricted to PSYC majors only.

0101	Alexander Shackman MW 5:00pm - 6:15pm	Seats (Total: 75) ONLINE

PSYC436 **Introduction to Clinical Psychology: From Science to Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC300.

Critical analysis of clinical psychology, with particular emphasis on current developments and trends.

Restricted to undergraduate PSYC majors only.

Click here for sample course syllabus.

0101	Andres De Los Reyes MWF 11:00am - 11:50am	Seats (Total: 75) ONLINE

PSYC437 **The Assessment and Treatment of Addictive Behaviors**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100; and 9 credits in PSYC courses. Credit only granted for: PSYC309E (taken in the Winter Term) or PSCY437. Formerly: PSYC309E.

Explores the current research in assessment and treatment of addictive behaviors. Topics may include addictions in the areas of alcohol, drugs, nicotine, gambling, and eating.

For PSYC majors only.

0101	Christopher Seitz-Brown	Seats (Total: 60)
	MWF 9:00am - 9:50am	ONLINE

PSYC440 **Experimental Psychology: Cognitive Processes and Legal Applications**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC341 and PSYC300. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits.

A survey of the content, models, and methods in cognitive psychology with an emphasis on attention and encoding, recall, recognition, judgment, signal detection theory, and applying cognitive theories to situations in the legal system. Students integrate scientific theories with real-life legal situations. Course topics include research methodology in assessing and addressing cognitive mechanisms and how this understanding may help eyewitness and victim recall and recognition, perpetrator recall, assessing scientific theories of repression, and real life examples.

0101	Tracy Tomlinson	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	ONLINE	
	W 1:00pm - 4:00pm	ONLINE	Lab

PSYC442 **Psychology of Language**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC300 and PSYC341. Restriction: Must be in Psychology program.

Introductory survey of the psychology of language, focusing on the cognitive processes that enable us to produce and understand language. Topics include speech perception, speech production, syntactic processing, language development, language disorders, and the brain bases of language.

Contact department for information to register for this course.

PSYC450 **Applying Psychology to the Workplace: Industrial Organizational Psychology Laboratory**

Credits: 4 Grading Method: Regular, Pass-Fail

Prerequisite: PSYC300 and PSYC361.

In this laboratory course, students use data analytic techniques, along with psychology theories and principles, to solve problems and provide recommendations to mock organizations. Along with learning theories in industrial-organizational psychology and statistical analysis, students will improve personal presentation skills that promote effective communication of information.

0101	Benjamin Jones MW 2:00pm - 2:50pm F 10:00am - 11:50am	Seats (Total: 13) ONLINE ONLINE	 Lab
0102	Benjamin Jones MW 2:00pm - 2:50pm F 12:00pm - 1:50pm *Contact the department to register.*	Seats (Total: 12) ONLINE ONLINE	 Lab
0201	Benjamin Jones MW 2:00pm - 2:50pm Th 10:00am - 11:50am	Seats (Total: 13) ONLINE ONLINE	 Lab
0202	Benjamin Jones MW 2:00pm - 2:50pm Th 12:00pm - 1:50pm	Seats (Total: 12) ONLINE ONLINE	 Lab

PSYC468H **Field Experience and Special Assignments in Honors**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An individual experience arranged by the honors student and his or her supervisor. A proposal submitted to the honors faculty in the semester preceding registration for the course should state the activities anticipated and the method of evaluation.

0401	Andrea Chronis-Tuscano Class time/details on ELMs	Seats (Total: 20) ONLINE
1901	Lea Dougherty Class time/details on ELMs	Seats (Total: 20) ONLINE

5008	Karen O'Brien Class time/details on ELMs	Seats (Total: 1) ONLINE
8101	Tracy Riggins Class time/details on ELMs	Seats (Total: 20) ONLINE
8881	Robert Slevc Class time/details on ELMs	Seats (Total: 20) ONLINE
9102	Jonathan Mohr Class time/details on ELMs	Seats (Total: 20) ONLINE
9108	Derek Iwamoto Class time/details on ELMs	Seats (Total: 20) ONLINE
9109	Edward Bernat Class time/details on ELMs	Seats (Total: 20) ONLINE
9110	Edward Lemay Class time/details on ELMs	Seats (Total: 20) ONLINE
9995	Andres De Los Reyes Class time/details on ELMs	Seats (Total: 20) ONLINE

PSYC469H **Honors Thesis Proposal Preparation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Development of honors thesis proposal by preliminary research and literature review. Presentation of formal proposal to the thesis committee.

Restricted to undergraduate PSYC majors only.

Contact department for information to register for this course.

PSYC478 **Independent Study in Psychology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Information about independent study may be obtained in BPS 1121. Restricted to PSYC majors (20010) only. The student must have completed 9 hours in PSYC with at least a 3.0 GPA in PSYC and a 2.8 overall GPA.

Contact department for information to register for this course.

PSYC479 **Special Research Problems in Psychology**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Information about research credit may be obtained in BPS 1121. Restricted to PSYC majors (20010) only. The student must have completed 9 hours in PSYC with at least a 3.0 GPA in PSYC and a 2.8 overall GPA.

Contact department for information to register for this course.

PSYC489G **Advanced Special Topics in Psychology; Hormones and Behavior**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Treatment of a specialized topic in psychology.

Prerequisite: PSYC301, PSYC202, PSYC304, or equivalent; or written permission of the instructor and department. Also offered as NACS728O. Credit only granted for PSYC489G or NACS728O. Formerly: PSYC309Z. This course presents a comprehensive overview of the field of behavioral endocrinology, the study of the relationship between hormones and behavior, from a psychobiological perspective. We will examine the major mammalian endocrine systems, how hormones influence sex determination, how hormones underlie sex differences in brain structure and function, the role of hormones in parental and social behaviors, mood disorders, homeostasis, cognition, and stress. Both normal and abnormal hormonal pathologies will be discussed. Due to the physiological and experimental perspectives of this course, much of the phenomenology that we will be studying will be based on research in species other than humans. This species comparative approach will reveal interesting "ways of doing things" that are intriguingly different from how "humans" do things."

0101	Erica Glasper Andrews	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ONLINE

PSYC489Z **Advanced Special Topics in Psychology; Asian American Psychology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Treatment of a specialized topic in psychology.

Also offered as AAST498J. Credit only granted for AAST498J or PSYC489Z. Restricted to PSYC majors only.

0101	Derek Iwamoto	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	ONLINE

PSYC499H **Honors Thesis Research**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

In addition to the department and instructor, the director of the honors program may be contacted to obtain a section number. Prerequisite: permission of the thesis advisor. Permission may be obtained in BPS 1147. Restricted to undergraduate PSYC majors only.

Contact department for information to register for this course.

PSYC601 **Quantitative Methods I**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Prerequisite: PSYC200; or students who have taken courses with comparable content may contact the department.

A basic course in quantitative/mathematical analysis and statistical methods in psychology with an emphasis on conceptual understanding. Topics include issues in measurement, probability theory, statistical inference and hypothesis testing, parameter estimation, bivariate regression, and correlation.

For PSYC majors only. For all non-psychology graduate students, written permission of the instructor and department is required.

0101	Alison Robey	Seats (Total: 18)	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

PSYC603 **Introduction to Industrial and Organizational Psychology**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: PSYC603 or PSYC730. Formerly: PSYC730.

Advanced survey of industrial-organizational psychology, including selection, training, motivation, group processes, leadership, organizational psychology, and organizational theory. Readings stressed and seminar time will be used for lectures, discussion and integration of the reading materials.

PWI1	Nikita Arun	Seats (Total: 40)	
	Meets August 31, 2020 - November 20, 2020		
	M 5:00pm - 8:30pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Restricted to students in Industrial/Organizational Psychology program.		

PSYC614 **Emotion: From Biological Foundations to Contemporary Debates in the Psychological Sciences**

Credits: 3 Grading Method: Regular, Audit

In this multidisciplinary graduate seminar, we will explore the current state of our scientific understanding of emotional states and traits, their biological roots, and their relevance to psychiatric disease. We will cover foundational knowledge in neuroscience and genetics, strengths and weaknesses of widely used methods, classic and cutting-edge empirical work, and ongoing conceptual debates. We will also discuss crucial discrepancies between the ways in which scientists and laypeople conceptualize emotions. In addition to human neuroimaging and genomic-association studies, we will explore biological research that affords causal insights, including animal models, acute pharmacological challenges, neurofeedback, and brain stimulation approaches, and case studies of patients with circumscribed neural insults.

0101	Alexander Shackman	Seats (Total: 24)
	M 9:00am - 11:45am	ONLINE

PSYC622 **Research Methods in Clinical Psychology**

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor. Credit only granted for: PSYC622 or PSYC718. Formerly: PSYC718.

Examines issues and strategies in conceptual systems, designs and methodologies of current research in clinical and community psychology. Readings include critical analyses of published research. Course requirements include preparation of a research proposal for a thesis level study.

PWC1	Christina Danko	Seats (Total: 45)
	Meets August 31, 2020 - November 20, 2020	
	Tu 6:00pm - 9:10pm	ONLINE
	Restricted to students in Clinical Psychological Science program.	

PSYC623 **Child Psychopathology**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)).

Examines the scientific and clinical literature relevant to normal and pathological behavior in children and adolescents. Issues in developmental psychopathology and consideration of processes initiated in childhood which manifest as pathology in adulthood are also considered.

0101	Nicole Lorenzo	Seats (Total: 20)
	Tu 2:00pm - 4:30pm	ONLINE

PSYC629B **Clinical Laboratory; Assessment Practicum**

Credits: 1-3 Grading Method: Sat-Fail

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

0101	Mary Byrne	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

PSYC629C **Clinical Laboratory; Adult Therapy Practicum**

Credits: 1-3 Grading Method: Sat-Fail

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

0101	Karen Schwartz	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

PSYC629D **Clinical Laboratory; Child and Adolescent Therapy Practicum**

Credits: 1-3 Grading Method: Sat-Fail

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

0101	Christina Danko	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

PSYC638 **Externship in Professional Psychology**

Credits: 1-3 Grading Method: Sat-Fail

Approved appointment as an extern in a mental health setting.

For PSYC majors only.

0101	Lea Dougherty	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
0201	Jonathan Mohr	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

PSYC639 **Internship in Professional Psychology**

Credits: 1 Grading Method: Sat-Fail

This seminar combines involvement with a program approved appointment as an intern in a mental setting with a supervisory review of the training experience.

For PSYC majors only.

0101	Lea Dougherty	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

PSYC643 **Ethics and Foundations of Assessment and Clinical Intervention**

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)). Credit only granted for: PSYC643 or PSYC719. Formerly: PSYC719.

An overview of the ethical and professional issues involved in psychological research, instruction, and practice, with special attention to advocacy and ethical decision making regarding a variety of primary, secondary, and tertiary clinical/community interventions.

0101	Mary Byrne	Seats (Total: 20)
	W 1:00pm - 3:30pm	ONLINE
PWC1	Andrea Chisolm	Seats (Total: 35)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE
	Restricted to students in Clinical Psychological Science program.	

PSYC644 **Basic Foundation of Clinical Interventions**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)).

General introduction to behavior theory and the basic behavioral principles that underlie behavior therapy. Provides an introduction to the philosophical, theoretical and empirical contributions of basic behavior analysis as they relate to behavior therapy, including examples of how behavior therapy is disconnected from its roots.

PWC1	Andrea Chisolm	Seats (Total: 40)
	Meets August 31, 2020 - November 20, 2020	
	Th 6:00pm - 9:10pm	ONLINE
	Restricted to students in Clinical Psychological Science program.	

PSYC651 **Writing and Critical Thinking**

Credits: 3 Grading Method: Regular

Restriction: Must be enrolled in and have successfully completed all courses in the first 4 terms of the Clinical Psychological Science MPS program.

A capstone experience to integrate knowledge learned throughout the program and improve critical thinking and research writing skills. This will be done through the production of a major research paper in an area relevant to the current or future career goals of the student and by emphasizing critical thinking skills.

PWC1	Christina Danko	Seats (Total: 35)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE
	Restricted to students in Clinical Psychological Science program.	
PWC2	Jack Blanchard	Seats (Total: 40)
	Meets August 31, 2020 - November 20, 2020	
	Class time/details on ELMs	ONLINE
	Restricted to students in Clinical Psychological Science program.	

PSYC652 **Analytical Thinking: Statistical Methods at Work**

Credits: 3 Grading Method: Regular, Audit

Additional information: Students will be taught how to conduct analyses in R, SPSS, SAS, Stata, and excel; students are encouraged to practice analyses on at least two of these programs.

Personal and organizational growth begins with asking and answering great questions. Correspondingly, this course begins with demonstrations of how to translate business questions into research questions. Statistical methods used to answer business questions are taught first conceptually, then computationally using statistical software. This course emphasizes interpreting results, the regression model, and other issues salient to business research, such as handling large datasets. Students will be provided with a simulated dataset that they will use in learning how to frame and answer business questions using the techniques covered in this course. At the conclusion of this course, students will be required to provide an executive-level presentation on the business question, their findings, and resulting implications.

PCI1	Juliet Aiken	Seats (Total: 40)	
	Meets August 31, 2020 - November 20, 2020		
	M 5:00pm - 8:30pm	ESJ 1215	
	Class time/details on ELMs	ONLINE	
	Restricted to students in Industrial/Organizational Psychology program.		

PSYC654 **Advanced Analytical Thinking: Statistical Methods at Work II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PSYC652 and PSYC653. Restriction: Must be in the Master of Professional Studies in Industrial/Organizational Psychology Program.

Students will delve deeply into issues of interpreting and questioning analytic results. Students will learn how to creatively present empirical results in ways that grab the attention of, and are clear to, a variety of stakeholders. Students will present group projects in two presentations, one to the rest of the class (technical audience) and one to an expert panel of practitioners. Finally, this course will introduce students conceptually to a number of advanced statistical methods, such as meta-analysis and structural equation modeling.

PWI1	Meg O'Neill	Seats (Total: 40)	
	Meets August 31, 2020 - November 20, 2020		
	M 5:00pm - 8:30pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Restricted to students in Industrial/Organizational Psychology program.		

PSYC660 **Performance Management, Compensation, and Benefits**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the Master of Professional Studies in Industrial/Organizational Psychology Program.

This course draws together content on organizational behavior, selection, assessment, development, employee relations, and compensation, among other topics. Students in this course will learn about how to align organizational reward systems, including selection, development, performance appraisal, feedback, and compensation systems. This course will pull from current organizational research and theory on issues ranging from work motivation, employee retention, and feedback processes to issues of organizational strategy and culture.

PWI1	Kenneth Yusko	Seats (Total: 40)
	Meets August 31, 2020 - November 20, 2020	
	M 5:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE
	Restricted to students in Industrial/Organizational Psychology program.	

PSYC661 **Practicum in IO Psychology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PSYC603, PSYC652, PSYC653, and PSYC654. Restriction: Must be in the Master of Professional Studies in Industrial/Organizational Psychology Program.

In this practicum, students will work on IO-related tasks in an organization and will have the opportunity to apply what they have learned in class to real-world problems. Students will write a reflection paper reviewing what skills they have applied - and developed - while completing this practicum.

PWI1	Nikita Arun	Seats (Total: 40)
	Meets August 31, 2020 - November 20, 2020	
	M 5:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE
	Restricted to students in Industrial/Organizational Psychology program.	

PSYC692 **Assessment in Counseling Psychology I**

Credits: 3 Grading Method: Regular

Prerequisite: PSYC680. Credit only granted for: PSYC692 or PSYC721. Formerly: PSYC721.

Broad introduction to the construction of psychological tests and measures, and experience in test interpretation, with consideration of historical, legal, ethical, and cultural issues surrounding the assessment process.

0101	Jonathan Mohr	Seats (Total: 20)
	M 1:00pm - 4:00pm	ONLINE

PSYC700 **Theories and Strategies of Counseling Psychology**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BSOS-Psychology department. Credit only granted for: PSYC700 or PSYC711. Formerly: PSYC711.

Introduction to the professional field, examination of pertinent scientific and philosophical backgrounds, and survey of the major theories, principles, and training models in counseling. Correlated laboratory analogue experiences in dyadic and group interrelationships.

0101	Clara Hill	Seats (Total: 8)
	M 2:00pm - 4:50pm	ONLINE

PSYC732 **Selection and Classification Issues in Organizations**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PSYC603; and (PSYC602; or students who have taken courses with comparable content may contact the department). Or permission of instructor.

Consideration of societal, organizational and individual demands for appropriate use of individual differences in (primarily) initial placement of employees. Recruitment, and selection issues, the role of governmental regulations, and the role of individual factors in individual behavior are considered. Extensive coverage given to fundamental psycho-metric problems and the development of individual and organizational criteria of effectiveness.

PWI1	Kenneth Yusko	Seats (Total: 40)	
	Meets August 31, 2020 - November 20, 2020		
	M 5:00pm - 8:30pm	ONLINE	
	Class time/details on ELMs	ONLINE	Discussion
	Restricted to students in Industrial/Organizational Psychology program.		

PSYC798K **Graduate Seminar; Multilevel theory and dynamics**

Credits: 1-4 Grading Method: Regular, Audit

0101	James Grand	Seats (Total: 20)
	Th 2:00pm - 4:30pm	ONLINE

PSYC799 **Master's Thesis Research; MASTERS THESIS RSRCH**

Credits: 1-6 Grading Method: Sat-Fail

For PSYC majors only. For all non-psychology graduate students, written permission of the instructor and department is required.

Contact department for information to register for this course.

PSYC819D **Seminar in Personality and Development; Attachment Theory, Research, and Clinical Implications**

Credits: 3 Grading Method: Regular, Audit

An advanced seminar covering specialized topics.

0101	Jude Cassidy	Seats (Total: 10)
	Th 12:30pm - 3:00pm	ONLINE

PSYC888A **Research Methods in Psychology; Developmental Seminar**

Credits: 1-3 Grading Method: Regular, Audit

0101	Jude Cassidy	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

PSYC889 **Research Methods in Psychology; Cognitive and Neural Systems Seminar**

Credits: 1 Grading Method: Regular, Audit

0201	Matthew Roesch	Seats (Total: 10)
	W 1:00pm - 1:50pm	ONLINE

PSYC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PSYC899 **Doctoral Dissertation Research; Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Sat-Fail

For PSYC majors only. For all non-psychology graduate students, written permission of the instructor and department is required.

Contact department for information to register for this course.

RDEV Real Estate Development Fall 2020

RDEV250 **People, Planet, and Profit: Building Sustainable Places**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Cross-listed with ARCH271. Credit only granted for: ARCH271 or RDEV250.

An introduction to the four disciplines represented in the School: architecture and urban design, community planning, historic preservation, and real estate development, that work to create a more sustainable environment for the future to create a more sustainable environment for the future using our interpretation of the quadruple bottom line: socio-cultural, economic, environmental, and design sustainability. Students will be provided with an understanding of the fundamental scholarship and processes of each of these disciplines and examine the intersections between them. Additionally, they will learn by applying the approaches of the four disciplines through a series of field studies.

0101	Wayne Curtis	Seats (Total: 85)
	TuTh 3:30pm - 4:45pm	ONLINE

RDEV270 **Tax and Accounting for Real Estate Development**

(Perm req) Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development; and must not be in a major in the Robert H. Smith School of Business; and must not have completed BMGT210, BMGT220, or BMGT221.

An understanding of key tax and accounting principles and how they impact real estate development for students in the minor in real estate development is the purpose of this course. This course is geared for science, arts and humanities students who otherwise in their major would not take an accounting course as part of their major.

0101	Leslie Mostow	Seats (Total: 18)
	Tu 7:00pm - 9:40pm	ONLINE

RDEV350 **Real Estate Development: Introduction to Principles, Process, and Practice**

(Perm req) Credits: 3 Grading Method: Regular

Prerequisite: RDEV250 or ARCH271. Restriction: Must be enrolled in the RDEV Minor; and permission of ARCH-School of Architecture, Planning, & Preservation. Credit only granted for: RDEV150 or RDEV350. Formerly: RDEV150.

An introduction to the basic principles of real estate development: How real estate and communities get built and how value is created. The emphasis is on entrepreneurship and an experiential learning approach to the entrepreneurial real estate development process, principles, and practice.

0101	Marcus Ervin M 7:00pm - 9:40pm	Seats (Total: 30) ONLINE
0102	Thomas Kaufman M 7:00pm - 9:40pm	Seats (Total: 15) ONLINE

RDEV450 **Foundations of Real Estate Finance and Investment**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed RDEV270 or an approved accounting course with a grade of C- or better; and minimum grade of C- in RDEV350. Restriction: Must be enrolled in RDEV Minor; and permission of ARCH-School of Architecture, Planning, & Preservation.

Real Estate Finance and Investment addresses how real estate value is established, the fundamental foundations of the time value of money, as well as more real estate specific applications of return on investment, net operating income, the components of a real estate sources and uses statement, sources of real estate equity and debt financing, commonly used debt ratios and equity returns in real estate, as well as concepts of sensitivity analysis and exit strategies.

0101	Kathryn Corby W 7:00pm - 9:40pm	Seats (Total: 25) ONLINE
0102	Thomas Dwyer W 7:00pm - 9:40pm	Seats (Total: 10) ONLINE

RDEV600 **Principles and Practice of Real Property Development**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688T or RDEV600. Formerly: RDEV688T.

An introduction to basic principles of real estate development: How real estate and communities get built and how value is created. The emphasis is on entrepreneurship and an experiential learning approach to the entrepreneurial real estate development process, principles, and practice.

0101	Thomas Kaufman M 7:00pm - 9:40pm	Seats (Total: 19) ONLINE

RDEV603 **Introduction to Real Property Finance**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of the Department. Credit only granted for: RDEV688Z, RDEV689V, or RDEV603. Formerly: RDEV688Z and RDEV689V.

Introduction to Real Property Finance addresses how real estate value is established, the fundamental foundations of the time value of money, as well as more real estate specific applications of return on investment, net operating income, the components of a real estate sources and uses statement, sources of real estate equity and debt financing, commonly used debt ratios and equity returns in real estate, as well as concepts of sensitivity analysis and exit strategies.

0101	Thomas Dwyer W 7:00pm - 9:40pm	Seats (Total: 20) ONLINE

RDEV605 **Tax and Accounting for Real Property Developers**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688K or RDEV605. Formerly: RDEV688K.

This course is designed to familiarize students with taxation and accounting as it pertains to real estate development.

0101	Leslie Mostow Tu 7:00pm - 9:40pm	Seats (Total: 28) ONLINE

RDEV620 **Market Analysis for Real Property Development**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV689M or RDEV620. Formerly: RDEV689M.

Designed to introduce and familiarize students with completing market analysis for real property projects. Includes a broad range of land uses including for-rent and for-sale residential, retail, office, and hospitality. Covers all aspects of completing a market analysis from the site visit to recommendations, and all the steps in-between. Examines how various real estate practitioners, such as developers, builders, investors, landowners, and public officials, utilize market studies.

0101	Abigail Ferretti M 7:00pm - 9:40pm	Seats (Total: 28) ONLINE

RDEV630 **Real Property Finance and Investment**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV630, RDEV688B, or URSP664. Formerly: RDEV688B.

This course is designed to introduce students who have experience in real estate finance or have taken an introductory course in real estate finance and investment to move to this intermediate course that addresses foundational concepts of commercial real estate finance and the measures used in analyzing and evaluating real estate projects. Quantitative analysis and financial modeling comprise the main focus.

0101	Seydina Fall Tu 7:00pm - 9:40pm	Seats (Total: 19) ONLINE

RDEV635 **Capital Markets and Real Estate Investments for Developers**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: RDEV630, URSP664, or RDEV688. Restriction: Must be in Real Estate Development (Master's) program; or permission of ARCH-Real Estate Development. Credit only granted for: RDEV635 or RDEV688F. Formerly: RDEV688F.

An advanced course in real estate finance focusing on capital markets and complex financing mechanism in the public and private markets for raising capital for development of public, private and public/private projects.

0101	Kathleen Miles Th 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 19) ASY 1213 ONLINE

RDEV640 **Principles of Urban Design for Real Property Developers**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688J or RDEV640. Formerly: RDEV688J.

Introduces students to the design issues associated with development of the basic real property asset classes (office, retail, and residential) and the context driven forces that shape these different development types. Also introduces non-design students to the principles of visual literacy and the capacity of different property to support development in the effort to enhance a community.

0101	Robert McClennan	Seats (Total: 25)
	Tu 7:00pm - 9:40pm	ONLINE

RDEV660 **Commercial Leasing for Real Property Developers**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688L or RDEV660. Formerly: RDEV688L.

Provides students with a hands-on look at commercial and real estate leases, lease provisions, and current market activity, a key factor in determining when and whether to proceed with developing a commercial property.

0101	Suzanne White, Martha Naughten	Seats (Total: 25)
	W 7:00pm - 9:40pm	ONLINE

RDEV670 **Negotiating Agreements & Resolving Conflicts when Developing Real Property**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688E or RDEV670. Formerly: RDEV688E.

Designed to develop students' negotiation and leadership skills for managing differences between individuals and groups while in the process of developing and operating real property. Includes a blend of skill-building exercises and theory discussions about the behavior of individuals to understand negotiation dynamics.

0101	Ronald McDonald	Seats (Total: 16)
	M 7:00pm - 9:40pm	ONLINE

RDEV688D **Selected Topics in Real Estate Development; Geo-Underwriting: Location-Based Project Feasibility Analysis - From Segregation to Gentrification**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Selected topics in real estate development.

This course overviews fundamentals of project level real estate underwriting and its inextricable relationship to the neighborhood context. The construct of "neighborhood" is explored throughout the course as both a social organizing principle and as an economic marketplace. Neighborhoods are considered throughout the historical forces that have shaped them, reaching back to the original formation of ethnic and racial ghettos and moving forward through urban renewal and modern-day gentrification. The changing forms of the real estate projects that have sustained these neighborhoods over time are evaluated . As changes further continued in neighborhoods and altered perceived demands for housing and services, the factors that changed the viability of real estate projects are closely investigated. The course also considers the government and policy landscapes that have helped shape neighborhood form and the real estate types found there. These policies are understood through review of actual case examples.

0101	Instructor: TBA Th 7:00pm - 9:40pm	Seats (Total: 15) ONLINE

RDEV689Y **Current Topics in Real Estate Development; Guided Real Estate Development Project**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Explores a focused aspect in any of the five major phases of real estate development: planning, finance, law, design, construction, or management.

Prerequisite: Permission of the department.

0101	Maria Day-Marshall, Tanya Bansal Class time/details on ELMs	Seats (Total: 10) ONLINE

RDEV690 **Capstone Project: Real Property Feasibility Study**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Completion of at least 7 RDEV courses. Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688I or RDEV690. Formerly: RDEV688I.

The capstone course is designed to provide students with an opportunity to apply acquired classroom knowledge to real world conditions. Each student in the class will work separately to create a development proposal and feasibility study for an assigned property. For students doing a feasibility study of a development the study will address at least market analysis, entitlement process, construction, and financing for the project.

0101	Tanya Bansal, Maria Day-Marshall Tu 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 10) TWS 1320 ONLINE

0102	Maria Day-Marshall, Tanya Bansal Tu 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 10) Location: TBA ONLINE	
0103	Maria Day-Marshall, Tanya Bansal Tu 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 10) Location: TBA ONLINE	
0104	Maria Day-Marshall, Tanya Bansal Tu 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 10) Location: TBA ONLINE	
0105	Tanya Bansal, Maria Day-Marshall Tu 7:00pm - 9:40pm Class time/details on ELMs	Seats (Total: 10) Location: TBA ONLINE	

RELS Religious Studies Fall 2020

RELS120 Islamic Civilization

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHU

Cross-listed with HIST120. Credit only granted for: HIST120 or RELS120.

Introduction to society and culture in the Middle East since the advent of Islam: as a personal and communal faith; as artistic and literary highlights of intellectual and cultural life; and as the interplay between politics and religion under the major Islamic regimes.

0101	Antoine Borrut MW 9:00am - 9:50am F 10:00am - 10:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Antoine Borrut MW 9:00am - 9:50am F 11:00am - 11:50am	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Antoine Borrut MW 9:00am - 9:50am F 1:00pm - 1:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

RELS170 Greek and Roman Mythology

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU

Cross-listed with CLAS170. Credit only granted for: CLAS170 or RELS170. Additional information: This course cannot be taken for language credit.

An introduction to the mythology of ancient Greece and Rome. This course is particularly recommended for students planning to major in foreign languages, English, history, the fine arts, or journalism. Taught in English.

0101	Katherine Wasdin MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 21) ONLINE ONLINE	 Discussion
0102	Katherine Wasdin MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 21) ONLINE ONLINE	 Discussion
0103	Katherine Wasdin MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 21) ONLINE ONLINE	 Discussion
0104	Katherine Wasdin MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 21) ONLINE ONLINE	 Discussion
0105	Katherine Wasdin MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 21) ONLINE ONLINE	 Discussion
0106	Katherine Wasdin MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 21) ONLINE ONLINE	 Discussion
0107	Katherine Wasdin MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 21) ONLINE ONLINE	 Discussion
0108	Katherine Wasdin MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 21) ONLINE ONLINE	 Discussion

0109	Katherine Wasdin	Seats (Total: 22)	
	MW 11:00am - 11:50am	ONLINE	
	Th 9:30am - 10:20am	ONLINE	Discussion

RELS219E **Special Topics in Religious Studies; Visual Cultures of Islam**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in Religious Studies

Crosslisted with ARTH389L, AAST298B, PERS298E, and HIST219E. Credit granted for HIST219E, ARTH389L, AAST298B, PERS298E, or RELS219E. Visual Cultures of Islam is part of the Digital Islamic Studies Curriculum (digitalislam.umich.edu). This course is taught by renowned University of Michigan instructor Christiane Gruber, an expert in the field of Islamic Art, and digitally shared with the University of Maryland. In this course, Professor Gruber explores definitions of "Islamic" art and investigates various visual cultures of Islam around the world from the 7th to the 20th century. The course meets twice a week in real time using video conferencing technology and students are able to enroll directly at Maryland for course credit.

0101	Instructor: TBA	Seats (Total: 12)
	TuTh 11:30am - 1:00pm	ONLINE

RELS219G **Special Topics in Religious Studies; Archeology and History of Palestine: Neolithic to Muhammed**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in Religious Studies

Cross-listed with HIST219M. Credit granted for RELS219G or HIST219M. This class covers the archaeology and history of the Southern Levant, and surrounding regions, from before the time of the earliest cities to the arrival of Islam. Course introduces the discipline of archaeology, both in general, and as a means to investigate the important cultural, political, social, and religious developments that shaped this part of the Mediterranean world.

0101	Gregory Stoehr	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

RELS269 **Special Topics in Study Abroad II**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

RELS269G **Special Topics in Study Abroad II; From Asoka to Gandhi: Buddhism and Hinduism in Contemporary Society**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

RELS289D **God Wills It! The Crusades in Medieval and Modern Perspectives**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, SCIS

Cross-listed with: HIST133. Credit only granted for: HIST133 or RELS289D.

An examination of the identities and convictions both of the Western Europeans who participated in the Crusades and of the Easterners (Muslim, Christian, and Jewish) whom they encountered in the Holy Land. Focuses on the era of the first four great Crusades, from about 1095 to 1215. Consideration of the cultural impact of these movements on both Western Europe and the Middle East.

Jointly offered with HIST133. Credit only granted for: HIST133, HIST289 D, or RELS289D.

0101	Janna Bianchini MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0102	Janna Bianchini MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion
0103	Janna Bianchini MW 11:00am - 11:50am F 2:00pm - 2:50pm	Seats (Total: 24) ONLINE ONLINE	 Discussion

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RELS289I **What is Religion?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO, D | General Education: DSHU, DVCC, SCIS

Draws upon examples from a wide variety of religious traditions to explore the question of what religion is and how to best understand it. Engagement with diverse approaches to religion including phenomenology and the study of "the sacred"; sociology and the study of religious communities; and questions of religious experience, ritual, and identity formation.

0101	Maxine Grossman TuTh 9:30am - 10:45am	Seats (Total: 40) ONLINE	

RELS289J **Jerusalem in Antiquity: The History of Sacred Space in a Holy City**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP, SCIS

Cross-listed with: JWST289J. Credit only granted for: JWST289J or RELS289J.

Cross-listed with JWST289J. Credit will be granted for JWST289J or RELS289J. Examines the complex history of Jerusalem's status as a holy city, with a focus on constructions of sacred space in Judaism, Christianity, and Islam.

0101	Matthew Suriano MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Matthew Suriano MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Matthew Suriano MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Matthew Suriano MW 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion

RELS341 **Europe in the High Middle Ages: 1000-1500**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Cross-listed with HIST331. Credit only granted for: HIST331 or RELS341.

Medieval civilization in the 11th through 15th centuries. Emphasis on cultural and political developments of the high Middle Ages with study of the principal sources of medieval thought and learning, art and architecture, and political theory prior to the Renaissance.

0101	Janna Bianchini MW 2:00pm - 3:15pm	Seats (Total: 30) ONLINE	

RELS343 **The European Reformations**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST111; or permission of instructor. Cross-listed with H IST333. Credit only granted for: HIST333 or RELS343.

Examination of developments in European religion between 1450 and 1700; the late-medieval Church and its critics; rise of Protestant thought in Germany and its spread throughout Europe; reform efforts in the Catholic Church; religious wars and violence and their impact on state and society; consequences of religious reform in society and its impact on the family and women.

0101	Stefano Villani	Seats (Total: 30)
	TuTh 9:30am - 10:45am	CSI 1115

RELS369C **Special Topics in Study Abroad III; Between Tolerance and Conflict: Jewish, Christians and Muslims in the Iberian Peninsula**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

RELS369R **Special Topics in Study Abroad III; Christianity and the Roman Empire (100-425CE)**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

RELS419R **Tradition and Change: Jewish Religion in the Modern World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSHU, DVUP

Cross-listed with: JWST347, HIST429X. Credit only granted for: JWST347, HIST429X, or RELS419R.

An exploration of the history of the different modern Jewish religious movements that developed in Europe, starting with messianic movements and ending with Reform and Orthodoxy. Emphasis will be placed on the influence of the academic study of Judaism on the development of modern Jewish religious ideologies and practices.

Cross-listed with JWST347 and HIST429X. Credit granted for JWST347, HIST429X, or RELS419R. An exploration of the history of the different modern Jewish religious movements that developed in Europe, starting with messianic movements and ending with Reform and Orthodoxy. Emphasis will be placed on the influence of the academic study of Judaism on the development of modern Jewish religious ideologies and practices.

0101	Rachel Manekin	Seats (Total: 40)
	MW 4:00pm - 5:15pm	ONLINE

RELS429N **Advanced Topics in Religious History; Living with Pachamama: Religion and Ritual in the Andes from the Incas to the Present**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of religious history in a particular setting, with attention to particular themes, texts, events, or communities.

Cross-listed with AMST428N, LASC448N, and HIST428N. Credit granted for HIST428N, AMST428N, LASC448N, or RELS429N.

0101	James Maffie	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ONLINE

RELS499 **Independent Study in Religious Studies**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An advanced independent research project for qualified students, supervised by a faculty member, on a topic not ordinarily covered in available courses.

Contact department for information to register for this course.

RUSS Russian Fall 2020

RUSS101 **Intensive Elementary Russian I**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Russian. Credit only granted for: RUSS101 or (RUSS111 and RUSS112).

This intensive first-year course is intended to develop the four skills: reading, writing, listening and speaking with an emphasis on communicative competence.

This course has been put on a timed release system. Seats will be opended gradually by the registrar's office, to a total of 15 seats per section. If the course is full, please put yourself on the waitlist and contact Dr. Cynthia Martin (cmartin@umd.edu) for permission to enroll.

0101	Inna Hardman MWF 10:00am - 10:50am TuTh 9:30am - 10:45am	Seats (Total: 15) ONLINE ONLINE
0201	Inna Hardman MWF 11:00am - 11:50am TuTh 11:00am - 12:15pm	Seats (Total: 15) ONLINE ONLINE

RUSS201 **Intermediate Russian I**

Credits: 5 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: RUSS102 or RUSS114; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Russian.

Continued activation and expansion of skills and knowledge acquired in an elementary Russian course with the goal of communicative competence.

If the course is full, please put yourself on the waitlist and contact Dr. Cynthia Martin (cmartin@umd.edu) for permission to enroll.

0101	Zhanna Gerus-Vernola MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 15) ONLINE ONLINE

RUSS289I **The Power of the Word: Freedom of Speech in the U.S. and Russia**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU, SCIS

The central theme of Russian 287 is the abiding human propensity to ask questions, to use language to pursue inquiry. To be a "critical thinker," one must develop the habit and discipline of asking questions and challenging assumptions. Through a comparative approach to the US and Russian experiences, we will explore the role of language and its power in different political and social systems. We will explore such questions as: Why is free speech so fiercely defended in a democracy and such a threat to totalitarianism? What is the relationship between free speech, political power and dissent? Is the pen still mightier than the sword, even in the nuclear age? What has shaped our current attitudes toward freedom of expression? How has the concept of political free speech been extended to include freedom of expression in general, such as in the creative arts? What role do new technologies play in the arena of free speech debates? We will explore how freedom of speech and expression has been defended or its suppression justified in the US and Russia. We will practice the art of questioning and constructing counter-arguments throughout the course.

Restricted to students in the Carillon Community. Why is free speech so essential in a democracy and such a threat to totalitarianism? Through a comparative approach to the US and Russian experiences, we will explore the role of language and its power to ask questions and challenge assumptions. The abiding human propensity to ask questions forms the foundation for all critical thinking, a skill students will be encouraged to develop throughout the course.

0101	Cynthia Martin	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

RUSS301 **Advanced Russian I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: RUSS202; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of Russian.

Advanced training in written Russian communicative structures.

0101	Anastasiia Selemeneva	Seats (Total: 15)
	TuTh 9:30am - 10:45am	ONLINE

RUSS303 **Russian Conversation: Functional Skills**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: RUSS202; or students who have taken courses with comparable content may contact the department.

Intended for students who do not anticipate having the opportunity to study in Russia. Skills for daily life (both function and etiquette) and argumentation (rhetoric).

0101	Zhanna Gerus-Vernola	Seats (Total: 15)
	MWF 11:00am - 11:50am	ONLINE

RUSS386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-School of Languages, Literatures, and Cultures department.

Contact the department to obtain section numbers.

Contact department for information to register for this course.

RUSS398F **Selected Topics in Russian Language and Literature; Soviet Film: Soviet Cinema and Culture after Stalin**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Cross-listed with FILM329E. Credit granted for RUSS398F or FILM329E.

0101	Elizabeth Papazian	Seats (Total: 30)
	MW 12:00pm - 1:50pm	ONLINE

RUSS401 **Advanced Russian Composition**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: RUSS302; or students who have taken courses with comparable content may contact the department. Restriction: Not open to native speakers of Russian.

Approaches to argumentation, organization of information, contextualized grammar, appropriateness of lexical choice, genre, and register.

0101	Cynthia Martin	Seats (Total: 15)
	MWF 11:00am - 11:50am	ONLINE

RUSS439A **Selected Topics in Russian Literature; Russian History through Literature, Art, and Film**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Presentation of a topic in Russian literature.

Prerequsite - RUSS302 or permission on department An examination of the major events that changed the course of Russian history, from early days to our time, as portrayed in works of literature, art, and film. Taught in Russian.

0101	Anastasiia Selemeneva	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	ONLINE

RUSS499 **Independent Study in Russian**

(Perm req)

Credits: 1-3 Grading Method: Regular

Independent study under faculty supervision.

Contact department for information to register for this course.

RUSS798 **Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

RUSS799 **Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

SLAA Second Language Acquisition and Application — Fall 2020

SLAA610 **Research and Theories in Second Language Acquisition**

Credits: 3 Grading Method: Regular, Audit

Introduction to current theories and research findings Second Language Acquisition (SLA).

0101	Michael Long	Seats (Total: 10)
	M 2:00pm - 4:30pm	ONLINE

SLAA620 **Second Language Research Methodologies**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SLAA610; and must have completed or be concurrently enrolled in SLAA611.

An exploration of research methodology in second language acquisition (SLA), with a focus on developing practical skills in data analysis and interpretation. Preparation in both critical evaluation of existing research and design of new research models.

0101	Steven Ross	Seats (Total: 15)
	F 2:00pm - 4:30pm	ONLINE

SLAA649R **Special Topics in Second Language Acquisition; Research Critique**

Credits: 3 Grading Method: Regular, Audit

Current topics in research in second language acquisition.

0101	Kira Gor	Seats (Total: 10)
	Th 5:00pm - 7:30pm	ONLINE

SLAA650 **Second Language Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SLAA610; or permission of ARHU-School of Languages, Literatures, and Cultures department.

An overview of the field of linguistics with a particular attention to its application in SLA studies, introduces students to the basic concepts and skills related to the scientific study of language, and provides them with opportunities to apply these concepts and skills in the analysis of language. It covers topics such as phonetics, phonology, morphology, syntax, semantics, language acquisition, and language use.

0101	Nan Jiang	Seats (Total: 10)
	Tu 2:00pm - 4:30pm	ONLINE

SLAA719 **Second Language Acquisition and Application Internship**

Credits: 3 Grading Method: Regular, Audit

Internship at a site to be determined. Topics may include heritage language learning, immersion education, testing and assessment, translation and interpretation, and national language planning and policy.

Contact department for information to register for this course.

SLAA749P **Special Topics in Second Language Learning; Bilingual Language Processing**

Credits: 3

Grading Method: Regular, Audit

Current topics in research on Second Language Learning.

0101	Nan Jiang Th 2:00pm - 4:30pm	Seats (Total: 10) ONLINE

SLAA754 **Task-Based Language Teaching**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: SLAA649T or SLAA754. Formerly: SLAA649T.

Overview of Task-Based Language Teaching (TBLT) including needs and means analysis, syllabus design, materials writing, methodology and pedagogy, testing, and evaluation. Theoretical issues addressed include relationship of TBLT to research findings on the psychology of learning and SLA and libertarian approaches to education.

0101	Michael Long M 5:00pm - 7:30pm	Seats (Total: 10) ONLINE

SLAA760 **Fundamentals of Second Language Assessment**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: SLAA610.

An overview of current assessment models in foreign and second language learning.

0101	Steven Ross Tu 5:00pm - 7:30pm	Seats (Total: 10) ONLINE

SLAA779 **Directed Research in Second Language Acquisition and Application**

Credits: 1-3

Grading Method: Regular, Audit

Directed independent research in Second Language Acquisition or Application. In this capstone project, students engage in independent research under faculty direction.

Contact department for information to register for this course.

SLAA798 **Master's Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

SLAA799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

SLAA888 **Doctoral Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Individual instruction course.

Contact department for information to register for this course.

SLAA898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

SLAA899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

SLLC School of Languages, Literatures and Cultures Fall 2020

SLLC108D **Beg Less Commonly Taught Language I; Elementary Danish I**

Credits: 4 Grading Method: Regular, Pass-Fail

Study of any of the less commonly taught languages at the elementary level. Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

A Big Ten Academic Alliance CourseShare course. The instructor is at the University of Wisconsin, but you enroll and receive credit for it at Maryland. Before enrolling in the course, to determine appropriate placement heritage speakers and those with prior knowledge of Danish should contact the course instructor at Wisconsin, Ms. Bridgette Stoeckel: bstoeckel@wisc.edu. This is an introductory course in basic Danish, so we will be working with the important basic skills of language acquisition, i.e. speaking, listening, reading and writing. The most important aspect of learning a new language is using it, and we will base our strategy on the communicative language approach.

0101	Instructor: TBA	Seats (Total: 5)
	Meets September 4, 2020 - December 11, 2020	
	MTuWThF 9:55am - 10:45am	ONLINE

SLLC108N **Beg Less Commonly Taught Language I; Elementary Norwegian I**

Credits: 4 Grading Method: Regular, Pass-Fail

Study of any of the less commonly taught languages at the elementary level. Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

Elementary Norwegian I is a Big Ten Academic Alliance Course-Share course. The instructor is at the University of Minnesota, but you enroll and receive credit for it at Maryland. The course begins the language student's acquisition of proficiency in all four areas of Norwegian: listening, speaking, reading, and writing. Students will also gain knowledge of Norwegian culture. For more information about the course please contact the instructor, Kyle Korinta: kory0008@umn.edu or 612-625-4059.

0101	Instructor: TBA	Seats (Total: 5)
	Meets September 8, 2020 - December 16, 2020	
	MW 5:40pm - 7:50pm	ONLINE

SLLC108Q **Beg Less Commonly Taught Language I; Elementary Quechua I**

Credits: 4 Grading Method: Regular

Study of any of the less commonly taught languages at the elementary level. Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

Elementary Quechua I is a Big Ten Academic Alliance CourseShare course. The instructor is at the University of Michigan, but you enroll and receive credit for it at Maryland. Before enrolling in the course, to determine appropriate placement heritage speakers and those with prior knowledge of Quechua should contact the course instructor at UMich, Ms. Adela Carlos Rios: acarlosr@umich.edu, 734-647-4509. Introduces students with little or no Quechua proficiency to conversational and cultural skills needed to use the language in real life situations. Covers both written and spoken Quechua; introduces basic structures of Quechua while focusing on the development of speaking and reading skills; emphasis is on developing conversational ability. Those who successfully finish this course will gain sustained control of basic conversation.

0101	Instructor: TBA **Meets September 8, 2020 - December 11, 2020** TuTh 9:00am - 11:00am	Seats (Total: 5) ONLINE

SLLC108R **Beg Less Commonly Taught Language I; Elementary Urdu I**

Credits: 4 Grading Method: Regular, Pass-Fail

Study of any of the less commonly taught languages at the elementary level. Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

Elementary Urdu I is a Big Ten Academic Alliance Course-Share course. The instructor is at the University of Minnesota, but you enroll and receive credit for it at Maryland. To connect remotely, studentsshould have a private space, a computer with webcam and microphone, a stable internet connection, and headphones, in addition to any technical requirements from the instructor. Heritage speakers and those with prior knowledge of Urdu should contact the instructor of UMN before enrolling to determine appropriate placement, Meraj Ahmed: ahmedm@umn.edu or 612-624-4876. Basic listening, speaking, reading, and writing skills. Emphasizes development of communication competence.

0101	Instructor: TBA **Meets September 8, 2020 - December 16, 2020** MTuWThF 1:20pm - 2:10pm	Seats (Total: 5) ONLINE

SLLC108V **Beg Less Commonly Taught Language I; Vietnamese I**

Credits: 4 Grading Method: Regular

Study of any of the less commonly taught languages at the elementary level. Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

First year Vietnamese is a Big Ten Academic Alliance Course-Share course. The instructor is at Michigan State University, but you enroll and receive credit for it at Maryland. You will also need to be entered into the Michigan State University course management system Desire to Learn (D2L). For more information about this course, including textbook information and instructions on enrolling in D2L, please see https://goo.gl/yoEbEm. Heritage speakers and those with prior knowledge of Vietnamese need to contact the Course Coordinator at MSU before enrolling in the course to determine appropriate placement, Ms. Steider: steider@msu.edu, 517-355-5105.

0101	Instructor: TBA	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SLLC108Y **Beg Less Commonly Taught Language I; Elementary Yoruba I**

Credits: 4 Grading Method: Regular, Pass-Fail

Study of any of the less commonly taught languages at the elementary level. Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

Elementary Yoruba I is a Big Ten Academic Alliance CourseShare course. The instructor is at Indiana University, but you enroll and receive credit for it at Maryland. Before enrolling in the cours, to determine appropriate placement heritage speakers and those with prior knowledge of Yoruba should contacgt the course instructor at IU, Mr. Matthew Ajibade: maajibad@iu.edu. Introduction to Yoruba language, a major African language spoken in Nigeria. Basic grammatical structures and vocabulary. Emphasis on spoken language, listening comprehension, language used in everyday life and inspecific social settings.

0101	Instructor: TBA	Seats (Total: 5)
	Meets August 24, 2020 - December 18, 2020	
	MW 11:15am - 12:05pm	ONLINE
	TuTh 11:15am - 12:30pm	ONLINE

SLLC169B **Special Topics in Study Abroad I; Elementary Basque I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC169C **Special Topics in Study Abroad I; Elementary Basque II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC169D **Special Topics in Study Abroad I; Great Czech Writers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC169L **Special Topics in Study Abroad I; Basque Language and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC208N **Intermediate Less Commonly Taught Language I; Intermediate Norwegian I**

Credits: 4 Grading Method: Regular, Pass-Fail

Intermediate-level work on speaking, reading, and writing a less commonly taught language. Continued development of oral proficiency skills.

Intermediate Norwegian I is a Big Ten Academic Alliance CourseShare course. The instructor is at the University of Minnesota, but you enroll and receive credit for it at Maryland. For more information about the course, please contact the instructor, Hanna Zmijewska-Emerson at 612-624-4467 or zmije001@umn.edu Emphasis on intermediate proficiency in listening, reading, speaking, and writing. Contextualized work on grammar and vocabulary is combined with authentic readings and essay assignments.

0101	Instructor: TBA	Seats (Total: 5)
	Meets September 8, 2020 - December 16, 2020	
	MTuWThF 2:25pm - 3:15pm	ONLINE

SLLC208Q **Intermediate Less Commonly Taught Language I; Intermediate Quechua I**

Credits: 4 Grading Method: Regular, Pass-Fail

Intermediate-level work on speaking, reading, and writing a less commonly taught language. Continued development of oral proficiency skills.

Intermediate Quechua I is a Big Ten Academic Alliance Course-Share course. The instructor is at the University of Michigan, buy you enroll and receive credit for it at Maryland. Before enrolling in the course, to determine appropriate placement heritage speakers and those with prior knowledge of Quechua should contact the course instructor at UMich, Ms. Adela Carlos Rios: acarlosr@umic.edu or 731-647-4509. Emphasis is on conversation, but attention is also given to grammatical structure. Students learn complex structural patterns, build up vocabulary, get acquainted with Andean culture and society, and develop conversation skills.

0101	Instructor: TBA	Seats (Total: 5)
	Meets September 8, 2020 - December 16, 2020	
	MW 10:00am - 12:00pm	ONLINE

SLLC208R **Intermediate Less Commonly Taught Language I; Intermediate Urdu I**

Credits: 4 Grading Method: Regular, Pass-Fail

Intermediate-level work on speaking, reading, and writing a less commonly taught language. Continued development of oral proficiency skills.

Elementary Urdu I is a Big Ten Academic Alliance Course-Share course. The instructor is at the University of Minnesota, but you enroll and receive credit for it at Maryland. To connect remotely, studentsshould have a private space, a computer with webcam and microphone, a stable internet connection, and headphones, in addition to any technical requirements from the instructor. Heritage speakers and those with prior knowledge of Urdu should contact the instructor of UMN before enrolling to determine appropriate placement, Meraj Ahmed: ahmedm@umn.edu or 612-624-4876. Development of reading, writing, speaking, and listening skills. Grammar review, basic compositions, oral presentations.

0101	Instructor: TBA	Seats (Total: 5)
	Meets September 8, 2020 - December 16, 2020	
	MTuWThF 4:35pm - 5:25pm	ONLINE

SLLC208V **Intermediate Less Commonly Taught Language I; Vietnamese I**

Credits: 4 Grading Method: Regular

Intermediate-level work on speaking, reading, and writing a less commonly taught language. Continued development of oral proficiency skills.

Second year Vietnamese is a Big Ten Academic Alliance Course-Share course. The instructor is at Michigan State University, but you enroll and receive credit for it at Maryland. You will need to be entered into the Michigan State University course management system Desire to Learn (D2L). For more information about this course, including textbook information and instructions on enrolling in D2L, please see https://goo.gl/yoEbEm. The course pre-requisite is SLLC109V. Heritage speakers and those with prior knowledge of Vietnamese need to contact the Course Coordinator at MSU before enrolling in the course to determine appropriate placement, Ms. Steider: steider@msu.edu, 517-355-5105.

0101	Instructor: TBA	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SLLC269B **Special Topics in Study Abroad II; Scandinavian Moods in Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC269D **Special Topics in Study Abroad II; Catalan Language and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC269X **Special Topics in Study Abroad II; Intermediate Basque I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC269Y **Special Topics in Study Abroad II; Intermediate Basque II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC286 **Living the Good Life: Chinese Philosophy in the Modern World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU, SCIS

Additional information: Taught in English.

Confucius, Mencius, Zhuangzi and other Chinese thinkers who lived more than 2,000 years ago would argue that the contemporary Western emphasis on self-discovery (Find yourself) and self-acceptance has led you astray. See what they have to say and discuss what relevance it has for the modern world as we study how early Chinese thinkers wrestled with questions of existence, morality, and governance. No previous knowledge of Chinese philosophy and history will be assumed and no prerequisites are required. We will discuss ideas that are both historical and relevant to students' lives. What is "the Way"? How do we cultivate spontaneity? Is there a stable self? How can we be more alive? These are questions important for ancient kings but also for UMD students choosing a major, or wondering how ARHU can benefit them.

0101	Andrew Schonebaum	Seats (Total: 60)
	TuTh 2:00pm - 3:15pm	ONLINE

SLLC299P **Behavior of the Rich and Powerful, Past and Present**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Restriction: Must be in the Freshmen Connection program. Credit only granted for: SLLC290 OR SLLC299P. Formerly: SLLC299P. Additional information: Taught in English.

Through the study of fifteenth- and sixteenth-century courtesy literature, in this course we explore the various forms of behavior of the rich and powerful of the Italian Renaissance, an era that is much closer to our contemporary world than we might initially think, especially in regard to the way political and influential figures act in social situations and the image of themselves they present to others. What can we learn from observing and comparing the behavior of the rich and powerful of the past and present? In the public arena of these two worlds, does appearance matter more than truth?

Through the study of XV and XVI century courtesy literature, in this course we will explore the various forms of behavior of the rich and powerful of the Italian Renaissance, an era that is much closer to our contemporary world than we might initially think, especially in regard to the way political and influential figures act in social situations and the image of themselves they present to others. What can we learn from observing and comparing the behavior of the rich and powerful of the past and present? In the public arena of these two worlds, does appearance matter more than truth?

FC01	Joseph Falvo	Seats (Total: 18)
	MW 6:00pm - 7:15pm	ONLINE
	Restricted to students in Freshmen Connection.	

SLLC299R **Special Topics in World Cultures; Elementary Italian I**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit

Topic to be announced when course is offered.

Contact department for information to register for this course.

SLLC299Z **Special Topics in World Cultures; Spanish Civilization and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Topic to be announced when course is offered.

Contact department for information to register for this course.

SLLC309 **Language Partner Program**

(Perm req)

Credits: 1 Grading Method: Regular

For intermediate- to advanced-level language study. Conversations entirely in target language with native speaker.

Students must be available to meet online, synchronously on September 21, 2020 and November 30, 2020.

0101	Lindsay Yotsukura **Meets September 21, 2020 - December 7, 2020** M 4:00pm - 5:50pm Class time/details on ELMs *Arabic.*	Seats (Total: 10) ONLINE ONLINE	 Discussion
0102	Lindsay Yotsukura **Meets September 21, 2020 - December 7, 2020** M 4:00pm - 5:50pm Class time/details on ELMs *Chinese.*	Seats (Total: 10) ONLINE ONLINE	 Discussion
0103	Lindsay Yotsukura **Meets September 21, 2020 - December 7, 2020** M 4:00pm - 5:50pm Class time/details on ELMs *French.*	Seats (Total: 10) ONLINE ONLINE	 Discussion
0104	Lindsay Yotsukura **Meets September 21, 2020 - December 7, 2020** M 4:00pm - 5:50pm Class time/details on ELMs *German.*	Seats (Total: 10) ONLINE ONLINE	 Discussion

0105	Lindsay Yotsukura **Meets September 21, 2020 - December 7, 2020** M 4:00pm - 5:50pm Class time/details on ELMs *Italian.*	Seats (Total: 10) ONLINE ONLINE	 Discussion
0106	Lindsay Yotsukura **Meets September 21, 2020 - December 7, 2020** M 4:00pm - 5:50pm Class time/details on ELMs *Japanese.*	Seats (Total: 10) ONLINE ONLINE	 Discussion
0109	Lindsay Yotsukura **Meets September 21, 2020 - December 7, 2020** M 4:00pm - 5:50pm Class time/details on ELMs *Russian.*	Seats (Total: 10) ONLINE ONLINE	 Discussion
0110	Lindsay Yotsukura **Meets September 21, 2020 - December 7, 2020** M 4:00pm - 5:50pm Class time/details on ELMs *Spanish.*	Seats (Total: 10) ONLINE ONLINE	 Discussion

SLLC369A **Special Topics in Study Abroad III; Alternative Culture, Literature, Music and Lifestyles**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC369C **Special Topics in Study Abroad III; Czech Film**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC369D **Special Topics in Study Abroad III; Art and Dictatorship**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC369X **Special Topics in Study Abroad III; Advanced Basque I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC369Y **Special Topics in Study Abroad III; Advanced Basque II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC386 **Experiential Learning**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor and the student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

SLLC789 **Master's Independent Study**

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

SLLC889 **Doctoral Independent Study**

Credits: 1-3 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SMLP470 **Fundamentals of Entrepreneurial Ventures**

Credits: 3 Grading Method: Regular

Restriction: Restricted to students in the Southern Management Leadership Program. Credit only granted for: HLMN470, SMLP470, ENES460 or BMGT461. Formerly: HLMN470. Additional information: SMLP470 may not count toward any BMGT major or minor degree.

Learn the processes and skills needed to launch and manage start-up ventures, including technology startups. Assess the feasibility of a startup ventures, as well as how to apply best practices for planning, launching, and managing new companies by using real-world examples and in-depth case studies. Discuss a wide range of issues of importance and concern to entrepreneurs and learn to recognize opportunity, assess the skills and talents of successful entrepreneurs, and learn models and approaches that help navigate uncertainty.

0101	Gul Branco	Seats (Total: 75)
	F 2:00pm - 4:30pm	ONLINE

SMLP472 **Strategies for Innovation & Entrepreneurship**

Credits: 3 Grading Method: Regular

Restriction: Restricted to students in the Southern Management Leadership Program. Credit only granted for: HLMN472, SMLP472, BMGT467, or ENES463. Formerly: HLMN472. Additional information: SMLP472 may not count toward any BMGT major or minor degree.

Understand the process of technological change; the ways that firms come up with innovations; the strategies that firms use to benefit from innovation; and how to create new value not only through new products or services, but with novel technologies, business concepts, organizing structures, transaction/financing mechanisms, distribution channels, and market segmentation. Challenge students to think about how to create value and build a productive business organization with available resources (e.g. intelligence, insight, energy, initiative and personal relationships).

0101	Harry Alford	Seats (Total: 75)
	F 1:00pm - 3:30pm	ONLINE

SOCY Sociology Fall 2020

SOCY100 **Introduction to Sociology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

The fundamental concepts and principles of sociology. Includes consideration of culture, patterns of social interaction, norms, values, social institutions, stratification, and social change.

0101	Joey Brown TuTh 9:30am - 10:45am	Seats (Total: 90) ONLINE
0201	Joey Brown TuTh 12:30pm - 1:45pm	Seats (Total: 90) ONLINE
0301	Amelia Branigan MW 2:00pm - 3:15pm	Seats (Total: 120) ONLINE
0401	Brian Connor MWF 11:00am - 11:50am	Seats (Total: 90) ONLINE
FC01	Daniel Swann MW 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 39) ONLINE
FC02	Daniel Swann TuTh 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 39) ONLINE

SOCY100H **Introduction to Sociology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

The fundamental concepts and principles of sociology. Includes consideration of culture, patterns of social interaction, norms, values, social institutions, stratification, and social change.

Open to Honor students only.

0101	Brian Connor MWF 10:00am - 10:50am	Seats (Total: 25) ONLINE

SOCY105 **Introduction to Contemporary Social Problems**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

An examination of contemporary social problems through sociological perspectives; ways in which social problems are part of the organization of society; a detailed study of selected social problems including social conflict and social inequality.

0101	Philip Cohen TuTh 12:30pm - 1:45pm	Seats (Total: 120) ONLINE	
0201	Zsuzsa Daczo TuTh 3:30pm - 4:45pm	Seats (Total: 120) ONLINE	
0301	Mollie Greenberg MWF 1:00pm - 1:50pm	Seats (Total: 60) ONLINE	
FC01	Daniel Swann MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 33) ONLINE	

SOCY201 **Introductory Statistics for Sociology**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSAR

Prerequisite: SOCY100; and (MATH107 or MATH111). Or students who have taken courses with comparable content may contact the department. Restriction: Must not have completed STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Elementary descriptive and inferential statistics. Construction and percentaging of bivariate contingency tables; frequency distributions and graphic presentations; measures of central tendency and dispersion; parametric and nonparametric measures of association and correlation; regression; probability; hypothesis testing; the normal, binomial and chi-square distributions; point and interval estimates.

0101	Alan Neustadtl TuTh 11:00am - 12:15pm W 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Lab
0102	Alan Neustadtl TuTh 11:00am - 12:15pm W 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Lab

SOCY202 **Introduction to Research Methods in Sociology**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

The underlying logic, major strategies, specific techniques and skills of sociological research. Research design, measurement, data collection, sampling, field research experiments, surveys, index and scale construction, data analysis, interpretation and report writing.

0201	Wayne Santoro TuTh 11:00am - 12:15pm F 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Lab
0202	Wayne Santoro TuTh 11:00am - 12:15pm F 10:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Lab
0203	Wayne Santoro TuTh 11:00am - 12:15pm F 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Lab
0204	Wayne Santoro TuTh 11:00am - 12:15pm F 12:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Lab

SOCY203 **Sociological Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY100.

Development of the science of sociology; historical backgrounds; recent theories of society. Required of all sociology majors.

0101	Meyer Kestnbaum TuTh 12:30pm - 1:45pm	Seats (Total: 78) ONLINE

SOCY227 **Introduction to the Study of Deviance**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Credit only granted for: SOCY227 or SOCY327. Formerly: SOCY327.

An introduction to the sociological study of deviant behavior, covering such topics as mental illness, sexual deviance, and the use of drugs.

0101	Zsuzsa Daczo TuTh 2:00pm - 3:15pm	Seats (Total: 50) ONLINE

0201	Mollie Greenberg	Seats (Total: 50)
	MWF 12:00pm - 12:50pm	ONLINE

SOCY230 **Sociological Social Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Theoretical perspectives and their applications. Socialization through the life course, the self-concept, attitudes, emotion, attribution, interpersonal relations, group processes, deviance, and social change.

0101	Amanda Dewey	Seats (Total: 192)
	TuTh 11:00am - 12:15pm	ONLINE

SOCY236 **Gender and Health**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSSP

The relationship between gender and health is the central focus of this course, and how this relationship is conditioned by race-ethnicity, sexuality, and social class. We consider how sociopolitical and environmental factors influence gendered associations with physical and mental health. In addition, this is a course on how to do the disciplinary work of sociology. Social policies surrounding health have been crucial to creating our current understandings of our system, and this course will give insight into how policies are crafted through a peer reviewed process that relies on critical feedback from sociologists engaged in the same project, in this case, the other students in this course.

0101	Liana Sayer	Seats (Total: 78)
	MW 10:00am - 10:50am	ONLINE
	Class time/details on ELMs	ONLINE

SOCY241 **Inequality in American Society**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB, D

The dynamics of inequality: its social production, politics, future, and ideological bases. Utopian communities, efforts to eliminate inequality.

0101	Collin Mueller	Seats (Total: 80)
	TuTh 12:30pm - 1:45pm	ONLINE

SOCY242 **Sociology of Homelessness**

Credits: 3 | Grading Method: Regular | General Education: DSSP

Examines the causes of and solutions for homelessness in society. How social scientists analyze social issues using ethnographic observation, surveys, official statistics, and other research methods. Discusses how policies have responded to the problem of homelessness, and how to evaluate their effectiveness.

0101	Reeve Vanneman	Seats (Total: 36)
	TuTh 2:00pm - 3:15pm	ONLINE

SOCY325 **The Sociology of Gender**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Prerequisite: 3 credits in SOCY courses. Cross-listed with: WGSS325. Credit only granted for: SOCY325, WMST325 or WGSS325. Formerly: WMST325.

Institutional bases of gender roles and gender inequality, cultural perspectives on gender, gender socialization, feminism, and gender-role change. Emphasis on contemporary American society.

0101	Liana Sayer	Seats (Total: 60)
	MW 11:00am - 11:50am	ONLINE
	Class time/details on ELMs	ONLINE

SOCY335 **Sociology of Health and Illness**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

An exploration of the social model to studying health and illness: how meanings and experiences of health and illness are socially produced. How experiences are shaped by the interaction of external social environments (culture, community) and the internal environment (human body), and by socio-demographic variables (race, class, gender, etc.). Disparities in health and healthcare delivery, medicalization of society, determinants of health, social construction of illness, and the social organization of health care.

0101	Joan Kahn	Seats (Total: 80)
	TuTh 11:00am - 12:15pm	ONLINE

SOCY380 **Honors Independent Reading in Sociology**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of BSOS-Sociology department. Formerly: SOCY378.

This course permits sociology honor students to undertake a program or reading on a particular problem in sociology or a subfield therein. The reading will be done under the supervision of a member of the sociology faculty. Required of sociology honor students.

0101	Nicole Cousin-Gossett	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

SOCY381 **Honors Independent Research in Sociology**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY380. Formerly: SOCY388.

This course permits sociology students to define a particular problem in sociology or a subfield therein and to develop a research plan for use as a thesis topic. The work will be done under the supervision of a member of the sociology faculty.

Contact department for information to register for this course.

SOCY383 **Honors Thesis Research**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY381. Formerly: SOCY389.

Student research under the direction of a member of the sociology faculty, culminating in the presentation and defense of a thesis reporting the research.

Contact department for information to register for this course.

SOCY386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Permission of BSOS-Sociology department; and junior standing or higher.

To register, students must have departmental permission form signed by instructor and by Coordinator of Sociology Undergraduate Program.

Contact department for information to register for this course.

SOCY398G **Global Migration and the Israeli Case Study**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHS, DVUP

Cross-listed with: ISRL343. Credit only granted for: ISRL349K, GVPT368G, SOCY398G, SOCY398I, or ISRL343. Formerly: ISRL349K.

Over 70% of Israel's population is made of first, second or third generation immigrants, who came from over 70 countries, making Israel an ultimate immigrant society. This course will focus on the history of Israel as a case study for the understanding of the historical phenomena of modern immigration.

0101	Elia Etkin	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

SOCY399 **Independent Study in Sociology**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Integrated reading or research under the direction and supervision of a faculty member. A maximum of 6 credits may be earned by a student for the same field experience in SOCY386 and SOCY399 combined.

No more than 6 hours of 399 is allowed for credit.

Contact department for information to register for this course.

SOCY404 **SOCY Programming and Data Visualization**

Credits: 3 Grading Method: Regular

Prerequisite: SOCY201.

A course designed to teach quantitative programming and data visualization.

0101	Alan Neustadtl	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

SOCY410 **Social Demography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department.

Types of demographic analysis; demographic data; population characteristics; migration; mortality; fertility; population theories; world population growth; population policy.

0101	Feinian Chen	Seats (Total: 30)
	MW 2:00pm - 3:15pm	ONLINE

SOCY411 **Demographic Techniques**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: (SOCY201; or students who have taken courses with comparable content may contact the department); and SOCY410. Or permission of BSOS-Sociology department.

Basic techniques for analyzing population structure and demographic processes, including fertility, mortality and migration.

0101	Joan Kahn	Seats (Total: 29)
	TuTh 2:00pm - 3:15pm	ONLINE

SOCY420 **Qualitative Research Methods in Sociology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY201 and SOCY202.

Using the sociological imagination to independently explore research questions as designed by students. Readings will explore dilemmas qualitative researchers confront such as, how to conduct research ethically and how their background influences their findings and analysis. Students will learn how to collect data, analyze it, and present it to others.

0101	Dawn Dow	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	ONLINE

SOCY424 **Sociology of Race Relations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of UGST-Undergraduate Studies. Restriction: Must not have completed SOCY424. Cross-listed with: AAST424. Credit only granted for: AAST424 or SOCY424.

Analysis of race-related issues, with a primary focus on American society. The historical emergence, development, and institutionalization of racism; the impact of racism on its victims; and racially based conflict.

0101	Kris Marsh	Seats (Total: 29)
	Class time/details on ELMs	ONLINE

SOCY428 **Research in Inequality**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

This is the special topics research course for Stratification and Inequality.

0101	Reeve Vanneman	Seats (Total: 29)
	TuTh 11:00am - 12:15pm	ONLINE

SOCY431 **Principles of Organizations**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY201 and SOCY202; or permission of BSOS-Sociology department.

Structural and processual characteristics of organizations that make them effective for different purposes and in different environments. Effects of different institutional environments, small group processes, organizational networks, and leadership. Types of organizations studied include formal bureaucracies, professional organizations, and voluntary associations.

0101	Robert Pernick	Seats (Total: 29)
	TuTh 3:30pm - 4:45pm	ONLINE

SOCY432 **Social Movements**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department.

Movements that seek change in the social and political structure of society. Origins, tactics, organization, recruitment, and success. Case studies come from such movements as labor, civil rights, student, feminist, environmental, neighborhood, and gay rights.

0101	Wayne Santoro	Seats (Total: 29)
	TuTh 12:30pm - 1:45pm	ONLINE

SOCY457 **Sociology of Law**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Social, political, and cultural sources of legal norms and concepts; and how the law shapes society and society shapes the law using sociological theoretical frameworks. The role of social change, social reproduction and inequality (including race, class, gender, and sexuality) to achieve certain objectives such as compliance, deterrence and social control.

0101	Dawn Dow	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ONLINE

SOCY470 **Sex, Family Planning, and Inequality**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of Sociology Department.

Analysis of patterns in sexual activity, contraceptive use, and unintended pregnancy, and how they reinforce or alleviate socioeconomic, gender, and racial inequalities. Emphasis on the role of healthcare providers and contraceptive access, attitudes about motherhood and contraception, policy interventions, and institutional designs. Social and economic consequences of increasing women's ability to control their fertility.

0101	Shelby Hickman	Seats (Total: 29)
	TuTh 2:00pm - 3:15pm	ONLINE

SOCY480 **Researching the Middle East**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY201 and SOCY202; or permission of the Sociology department. Credit only granted for: SOCY498E or SOCY480. Formerly: SOCY498E.

Introduces religion, gender, and politics in the Middle East and North Africa. After an overview of the political and social history the focus will be on methods for carrying out fundamental issues facing Middle Eastern societies, including national identity, religion, gender relations and the status of women in the family, politics, education, and labor market.

0101	Mansoor Moaddel	Seats (Total: 19)
	TuTh 3:30pm - 4:45pm	ONLINE

SOCY481 **Ideology and Social Conditions in the Making of Terrorism in the Middle East and North Africa**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed 6 credits in SOCY courses or permission of the Sociology department. Restriction: Sophomore standing or higher.

The sociology of terrorism and political violence in the Middle East and North African will be explored in this course.

0101	Mansoor Moaddel	Seats (Total: 29)	
	TuTh 12:30pm - 1:45pm	ONLINE	

SOCY490 **Experimental Research Practicum**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY201 and SOCY202; or permission of the Sociology department. Restriction: Permission of BSOS-Sociology department. Additional information: This is the first course in the experimental research practicum 2-course sequence.

Hands-on experience in designing, conducting, and analyzing experimental research. Introduces students to causal inference in social scientific research, focusing on experimental designs. Students will get hands-on research experience running experimental studies in the group processes lab. Students will also work with the professor and graduate students in the department to develop a research idea that can be executed in the spring semester.

0101	Long Doan	Seats (Total: 29)	
	MW 2:00pm - 3:15pm	ONLINE	

SOCY498N **Selected Topics in Sociology; Society in an Era of Pandemics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

0101	Sonalde Desai	Seats (Total: 29)	
	Class time/details on ELMs	ONLINE	
	W 10:00am - 10:50am	ONLINE	Discussion

SOCY498O **Selected Topics in Sociology; Sociology of Mental Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

0101	Joey Brown	Seats (Total: 29)	
	MW 2:00pm - 3:15pm	ONLINE	

SOCY601 **Statistics For Sociological Research I**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SOCY201; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor. Credit only granted for: SOCY601 and SURV601.

Introductory statistical concepts are covered including descriptive statistics, probability, sampling distributions, expected values, hypothesis testing, tests of significance, measures of association, and if time permits, introduction to regression analysis. Statistical programming software may be used.

0101	Amelia Branigan	Seats (Total: 20)
	MW 10:00am - 11:15am	ONLINE

SOCY616 **Sociology Pro-Seminar**

Credits: 1 Grading Method: Sat-Fail

Restriction: Must be in Sociology (Doctoral) program. Credit only granted for: SOCCY699P or SOCY616. Formerly: SOCY699P.

The proseminar is the guide to Sociology as a profession, and how sociology is practiced here at the University of Maryland. The goal of the course is to help students gain insider knowledge about how to develop sociological knowledge and capabilities, and what it means to practice sociology as a graduate student and beyond. The course will discuss both practical aspects of professional life in general and specific topics of interest.

0101	Philip Cohen	Seats (Total: 20)
	F 10:00am - 10:50am	ONLINE

SOCY620 **Development of European and American Sociological Theory**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SOCY203 or SOCY403; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Review of the history of sociological thought with major attention to the key figures (from Marx to C. Wright Mills).

For SOCY majors only.

0101	Meyer Kestnbaum	Seats (Total: 20)
	Tu 3:30pm - 6:00pm	ONLINE

SOCY627 **Migration**

Credits: 3 Grading Method: Regular, Audit

Examines theories of immigration and immigrant adaptation, empirical patterns of migration and immigration, the economic and social effects of immigration, as well as immigration policy issues.

0101	Julie Park	Seats (Total: 20)
	Th 3:30pm - 6:00pm	ONLINE

SOCY633 **Qualitative Research Methods II, Field Research**

Credits: 3 Grading Method: Regular

Prerequisite: SOCY632; or students who have taken courses with comparable content may contact the department.

As the second course in the qualitative methods sequence, students are expected to have a general knowledge of qualitative methods. Students should have already learned how to collect and analyze qualitative data using interview and ethnographic methods. Student will spend this semester collecting and analyzing qualitative data and must begin the course with a formulated research question, a plan for data collection and sampling. Each student will spend the first two weeks preparing a proposal for submission the the University of Maryland's Institutional Review Board to gain Human Subjects approval to collect data. Then, students will spend a month collecting data, a month analyzing data using QSR NVivo, which will be taught as part of the coursework, and writing up the findings. The end product of the course will be an empirical paper based on the data collected and analyzed throughout the semester.

0101	Dana Fisher	Seats (Total: 20)
	W 3:30pm - 6:00pm	ONLINE

SOCY634 **Attitudes and Public Opinion**

Credits: 3 Grading Method: Regular, Audit

Processes involved in the formation of attitudes; effects of communication; measurement techniques.

0101	Stanley Presser	Seats (Total: 20)
	W 3:30pm - 6:00pm	ONLINE

SOCY646 **Public Image Management and Policy Solutions**

Credits: 3 Grading Method: Regular

Restriction: Must be in one of the following programs: Public Safety Leadership and Administration (Professional Master's); Leadership in Diverse Organizations (Graduate Certificate); Criminology and Criminal Justice (Master's); Criminology and Criminal Justice (Doctoral); Sociology (Master's); Sociology (Doctoral); or permission from BSOS-Sociology department. Additional information: - all classes will take place online.

Teaches students how to mitigate and solve problems that arise in their organization. Students will learn how to evaluate their organization, make recommendations for future development, and implement the practical aspects of the solution. Problems arise daily in organizations. Leaders need effective strategies to mitigate and solve these problems. While some problems are structural, daily problems often focus on social interactions among people. The course will focus on evaluating the source of problems, enhancing cultural competency among employees, restructuring and rebranding the organization, managing public image, and forming and implementing innovative policy solutions for long-term goals.

PLL1	Nicol Lee	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
	Must be in Public Safety Leadership and Administration or Leadership in Diverse Organizations. For permission to enroll, contact oes@umd.edu.	

SOCY657 **Constitutional Law and Public Safety**

Credits: 3 Grading Method: Regular

Restriction: Must be in one of the following programs: Master of Professional Studies in Public Safety Leadership and Administration (MPLA); Criminology and Criminal Justice (Master's); Criminology and Criminal Justice (Doctoral); Sociology (Master's); Sociology (Doctoral); or permission from BSOS-Criminology & Criminal Justice department. Additional information: - all classes will take place online.

Introduces students to the constitutional issues inherent in the practice of policing. Particular emphasis is placed on issues pertaining to the 4th, 5th, and 6th Amendments.

PLL1	Michael Vesely	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
	Must be in Public Safety Leadership and Administration program. For permission to enroll, contact oes@umd.edu.	

SOCY699 **Special Social Problems**

Credits: 1-16 Grading Method: Regular

Contact department for information to register for this course.

SOCY699C **Special Social Problems; Introduction to Computing for Sociologists**

Credits: 1

Grading Method: Regular, Audit

0101	Amelia Branigan F 2:00pm - 4:00pm	Seats (Total: 20) ONLINE

SOCY699D **Special Social Problems; Logic of Social Inquiry**

Credits: 3

Grading Method: Regular, Audit

Restricted to Sociology Graduate Students

0101	Long Doan Th 3:30pm - 6:00pm	Seats (Total: 20) ONLINE

SOCY699E **Special Social Problems; Critical Race Initiative**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Restriction: Permission of Instructor required. Please contact instructor or department for details.

0101	Dawn Dow Contact instructor or department for details.	Seats (Total: 10)

SOCY699M **Special Social Problems; Pro-Seminar for BA/MA Students**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Restricted to students in the 5-Year BA/MA Sociology program.

0101	Brian Connor M 12:00pm - 1:00pm	Seats (Total: 10) ONLINE

SOCY709D **Advanced Special Topics in Data Analysis; Categorical Analysis**

Credits: 3

Grading Method: Regular, Audit

An intensive examination of an area of interest in data analysis, including such topics as log linear analysis; discriminant function analysis; canonical correlation; factor analysis; analysis of qualitative data; content analysis; mathematical models.

0101	Feinian Chen	Seats (Total: 20)
	M 3:30pm - 6:00pm	ONLINE

SOCY789D **Advanced Special Topics in Social Stratification; RESIDENTIAL SEGREGATION**

Credits: 3 Grading Method: Regular, Audit

An intensive examination of an area of interest in the field, including such topics as macrostratification; measurement of prestige; institutional variation in status attainment.

0101	Kris Marsh	Seats (Total: 20)
	Th 3:30pm - 6:00pm	ONLINE

SOCY799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

SOCY819 **Research Seminar in Social Psychology**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in social psychology.

0101	Jeffrey Lucas	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SOCY829 **Research Seminar in Sociological Theory**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in sociological theory.

0101	Meyer Kestnbaum	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SOCY849 **Research Seminar in Demography**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in demography.

0101	Sonalde Desai	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SOCY858 **Research Seminar in Gender, Work and Family**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take the specialty examination in Gender, Work and Family.

0101	Liana Sayer	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SOCY869 **Research Seminar in Military Sociology**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in military sociology.

0101	Meredith Kleykamp	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SOCY889 **Research Seminar in Social Stratification**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in stratification.

0101	Philip Cohen	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SOCY898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

SOCY899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

SPAN Spanish Fall 2020

SPAN103 **Intensive Elementary Spanish**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Spanish. Credit only granted for: SPAN102 or SPAN103.

Covers speaking, reading, writing, listening, and culture of Spanish-speaking world.

0101	Alvaro Villar Cobo MWF 10:00am - 10:50am Tu 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE
0201	Jose Magro MWF 11:00am - 11:50am Tu 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE
0401	Tatiana Chi Miranda MWF 1:00pm - 1:50pm Tu 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE
0501	Jose Magro MWF 2:00pm - 2:50pm Tu 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE

SPAN169O **Special Topics in Study Abroad I; Beginner Spanish I**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN169P **Special Topics in Study Abroad I; Beginner Spanish II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN169X **Special Topics in Study Abroad I; Elementary Spanish I**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN169Y **Special Topics in Study Abroad I; Elementary Spanish II**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN203 **Intensive Intermediate Spanish**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: SPAN103; or must have appropriate Foreign Language Placement Test (FLPT) score.
Restriction: Must not be a native/fluent speaker of Spanish.

Covers speaking, reading, writing, listening, and culture of Spanish-speaking world.

0201	Roberto Katrandjiyski MWF 10:00am - 10:50am Th 10:00am - 10:50am	Seats (Total: 25) ONLINE ONLINE
0301	Charis Gozzo MWF 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE
0401	Ofelia Montelongo Valencia MWF 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 25) ONLINE ONLINE
0601	Evelyn Canabal-Torres MWF 1:00pm - 1:50pm Th 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE

0701	Charis Gozzo MWF 1:00pm - 1:50pm Th 1:00pm - 1:50pm	Seats (Total: 25) ONLINE ONLINE
0801	Ofelia Montelongo Valencia MWF 2:00pm - 2:50pm Th 2:00pm - 2:50pm	Seats (Total: 25) ONLINE ONLINE

SPAN204 **Spanish Grammar Review**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: SPAN203; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Not open to fluent/native speakers of Spanish.

An in-depth study and analysis of selected grammatical topics in a contextualized framework.

0101	Ligia Gonzalez MWF 1:00pm - 1:50pm	Seats (Total: 25) ONLINE
0201	Olga Morozova TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE
0301	Olga Morozova TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE

SPAN206 **Spanish for Heritage Speakers I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Native or near native knowledge of and no formal education in Spanish.

Review of oral and written Spanish for students who have native or near native knowledge of, but no formal education in Spanish. Taught in Spanish.

Students new to language courses in SLLC must take the Foreign Language Placement Test in order to register.

0101	Evelyn Canabal-Torres MWF 10:00am - 10:50am	Seats (Total: 25) ONLINE

SPAN207 **Reading and Writing in Spanish**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: Must have completed or be concurrently enrolled in SPAN204; or must have appropriate Foreign Language Placement Test (FLPT) score.

Selected readings with emphasis on reading comprehension and the development of reading strategies. Work in composition writing and a review of selected grammatical topics. Complements material of SPAN204.

0101	Chila Hidalgo MWF 10:00am - 10:50am	Seats (Total: 25) ONLINE
0201	Chila Hidalgo MWF 11:00am - 11:50am	Seats (Total: 25) ONLINE
0301	Chila Hidalgo MWF 12:00pm - 12:50pm	Seats (Total: 25) ONLINE
0401	Maria Herrera Arvay TuTh 9:30am - 10:45am	Seats (Total: 25) ONLINE
0501	Maria Herrera Arvay TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE
FC01	Ofelia Montelongo Valencia MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection. Only students who anticipate earning a score of 4 or 5 on the Spanish Language and Culture AP Exam (or are transferring credit for SPAN203 or SPAN204) should register for this course.*	Seats (Total: 20) ONLINE

SPAN234 **Issues in Latin American Studies I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO, D | General Education: DSHS, DSHU, DVUP

Cross-listed with PORT234, LASC234. Credit only granted for: LASC234, PORT234, or SPAN234.

Interdisciplinary study of major issues in Latin America and the Caribbean, including Latin America's cultural mosaic, migration and urbanization. Democratization and the role of religions. Taught in English.

0101	Sarah Dowman TuTh 3:30pm - 4:45pm	Seats (Total: 30) ONLINE

0201	Sarah Dowman	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ONLINE

SPAN234H **Issues in Latin American Studies I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO, D | General Education: DSHS, DSHU, DVUP

Cross-listed with PORT234, LASC234. Credit only granted for: LASC234, PORT234, or SPAN234.

Interdisciplinary study of major issues in Latin America and the Caribbean, including Latin America's cultural mosaic, migration and urbanization. Democratization and the role of religions. Taught in English.

Open to Honor students only.

0101	Sarah Dowman	Seats (Total: 5)
	TuTh 3:30pm - 4:45pm	TWS 0214

SPAN269A **Special Topics in Study Abroad II; B1 Intermediate Level Spanish I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN269B **Special Topics in Study Abroad II; B1 Intermediate Level Spanish II**

Credits: 6 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN269D **Special Topics in Study Abroad II; Catalan Language and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN269I **Special Topics in Study Abroad II; Intermediate Spanish**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN269L **Special Topics in Study Abroad II; Spanish Language B1**

Credits: 6

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN301 **Advanced Grammar and Composition I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in SPAN207.

Practice of complex grammatical structures through reading and writing of compositions and essays. Specific lexical, syntactic, rhetorical, and stylistic devices will be highlighted.

0101	Ana Acedo Garcia MWF 10:00am - 10:50am	Seats (Total: 20) ONLINE
0201	Ana Acedo Garcia MWF 2:00pm - 2:50pm	Seats (Total: 20) ONLINE
0301	Luis Charry MWF 12:00pm - 12:50pm	Seats (Total: 20) ONLINE
0501	Daniela Hernandez TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE
0601	Jackson Monzon TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE
0701	Jackson Monzon TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE
0801	Juan Diaz TuTh 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

SPAN302 **Advanced Grammar and Composition II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN301.

Practice in and writing of different types of compositions and essays, including narrations, descriptions, and persuasive writing. Review of problematic syntactical structures.

Contact department for information to register for this course.

SPAN303 **Approaches to Cultural Materials in the Hispanic World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Prerequisite: SPAN301. Recommended: May elect to take SPAN311 and/or SPAN316 in same semester as SPAN303.

Development of proficiency in critical thought through the reading, viewing, and analytical discussion of major genres and styles of cultural materials selected from Spanish-speaking world. Taught in Spanish.

0101	Chris Lewis MWF 10:00am - 10:50am	Seats (Total: 20) ONLINE
0201	Chris Lewis MWF 11:00am - 11:50am	Seats (Total: 20) ONLINE
0301	Jose Naharro-Calderon MWF 1:00pm - 1:50pm	Seats (Total: 20) ONLINE
0401	Carmen Benito-Vessels TuTh 9:30am - 10:45am	Seats (Total: 20) ONLINE
0501	Cecilia Battauz TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE
0601	Daniela Bulansky TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE
0701	Hernan De Pinillos TuTh 2:00pm - 3:15pm	Seats (Total: 20) ONLINE

SPAN306 **Spanish for Heritage Speakers II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN206.

Practice of complex grammatical structures through reading and writing of compositions and essays. Specific lexical, syntactic, rhetorical and stylistic devices will be highlighted. Designed for Spanish speakers educated in English. Taught in Spanish.

0101	Evelyn Canabal-Torres MWF 11:00am - 11:50am	Seats (Total: 25) ONLINE

SPAN311 **Advanced Communication I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN301; and must have completed or be concurrently enrolled in SPAN303. Restriction: Must not be a native/fluent speaker of Spanish.

Further development of listening, speaking, and writing skills in Spanish. Opportunity to develop oral and written fluency, improve pronunciation and increase vocabulary. Individual and/or group oral presentations. Taught in Spanish.

0101	Nelida Devesa-Gomez MWF 1:00pm - 1:50pm	Seats (Total: 20) ONLINE
0201	Ana Acedo Garcia MWF 11:00am - 11:50am	Seats (Total: 20) ONLINE
0301	Nidia Reyes TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE
0401	Sofia Maurette TuTh 11:00am - 12:15pm	Seats (Total: 20) ONLINE

SPAN316 **Spanish Translation I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN301; and must have completed or be concurrently enrolled in SPAN303.

Translation of texts into Spanish and/or English. Taught in Spanish.

0101	Luis Charry MWF 10:00am - 10:50am	Seats (Total: 20) ONLINE
0301	Ginette Eldredge TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE

SPAN317 **Translation II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN316.

Translation of non-literary, non-technical texts into Spanish and/or English.

Contact department for information to register for this course.

SPAN325 **Hispanic Linguistics I: Phonetics and Phonology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN303; and (SPAN311 or SPAN316). Credit only granted for: SPAN310 or SPAN325. Formerly: SPAN310.

Descriptive study of the Spanish sound system. Practice in phonetic perception, transcription, and articulation. Particular attention to sentence phonetics; juncture, rhythm, stress, pitch. Taught in Spanish.

0101	Ana Acedo Garcia MWF 12:00pm - 12:50pm	Seats (Total: 25) ONLINE

SPAN331 **Spanish Culture, Civilization and Literature I: Medieval Times**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

The exploration of cultures of the Iberian Peninsula from its origins until the 15th century as well as the study of historical and political events that gave rise to the Spanish state. Taught in Spanish.

0101	Carmen Benito-Vessels TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE

SPAN332 **Spanish Culture, Civilization and Literature II: Renaissance and Baroque**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Spain from the late 15th through late 17th centuries, exploring the production of literary texts in their socio-historical, political, religious and cultural contexts and development. Taught in Spanish.

Contact department for information to register for this course.

SPAN333 **Spanish Culture, Civilization and Literature III: Modern Times**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Spain from the late 17th century through the present day, exploring the production of literary texts in their socio-historical, political, religious and cultural contexts and development. Taught in Spanish.

0101	Mehl Penrose TuTh 2:00pm - 3:15pm	Seats (Total: 25) ONLINE

SPAN361 **Latin American Literatures and Cultures I: From Pre-Columbian to Colonial Times**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

Overview of cultural history of Latin America from pre-Columbian civilizations to the Colonial period, exploring the foundations of the Spanish American cultural and literary tradition to approximately 1770. Taught in Spanish.

0101	Eyda Merediz MWF 10:00am - 10:50am	Seats (Total: 25) ONLINE
0201	Ginette Eldredge TuTh 9:30am - 10:45am	Seats (Total: 25) ONLINE

SPAN362 **Latin American Literatures and Cultures II: From Independence to Nation Formation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Latin America from the 18th Century to approximately 1900, exploring the production of literary texts in their socio-historical, political, and cultural contexts and development. Taught in Spanish.

Contact department for information to register for this course.

SPAN363 **Latin American Literatures and Cultures III: From Modernism to Neo-Liberalism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Latin America from the late 19th through the early 21st centuries, exploring the production of literary texts in their socio-historical, political, and cultural contexts and development. Taught in Spanish.

0101	Juan Carlos Quintero-Herencia MWF 1:00pm - 1:50pm	Seats (Total: 25) ONLINE
0201	Saul Sosnowski TuTh 12:30pm - 1:45pm	Seats (Total: 25) ONLINE

SPAN369A **Special Topics in Study Abroad III; Advanced Oral Communication in Spanish**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369B **Special Topics in Study Abroad III; Advanced Academic Writing in Spanish**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369F **Special Topics in Study Abroad III; Spanish Oral Skills through Theatre**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369G **Special Topics in Study Abroad III; Spanish for the Health Professional**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369J **Special Topics in Study Abroad III; Spanish Grammar and Expression**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369M **Special Topics in Study Abroad III; Spanish Language B2**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369O **Special Topics in Study Abroad III; Spanish Conversation and Oral Skills**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369P **Special Topics in Study Abroad III; Spanish Oral Techniques**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369Q **Special Topics in Study Abroad III; Spanish Phonetics and Phonology**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369R **Special Topics in Study Abroad III; Advanced Reading Skills in Spanish**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369V **Special Topics in Study Abroad III; Advanced Present-Day Spanish Usage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369W **Special Topics in Study Abroad III; Spanish Stylistics: Advanced Spanish Writing and Stylistics**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369Y **Special Topics in Study Abroad III; B2 Advanced Level Spanish 1**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369Z **Special Topics in Study Abroad III; B2 Advanced Level Spanish 2**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN370 **Spanish for Business I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN303; and (SPAN311 or SPAN316). Credit only granted for: SPAN315 or SPAN370. Formerly: SPAN315.

Business Spanish terminology, vocabulary and practices. Emphasis on everyday spoken and written Spanish. Readings and discussions of Spanish commercial topics. May include exposure to Spanish commercial topics. May include exposure to Spanish business environments. Taught in Spanish.

0101	Chila Hidalgo MW 2:00pm - 3:15pm	Seats (Total: 25) ONLINE
0201	Sarah Dowman TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE

SPAN372 **Spanish and the Law**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN311 or SPAN316. Credit only granted for: SPAN372 or SPAN359O. Formerly: SPAN359O.

Offers students the opportunity to enhance Spanish linguistic and intercultural communication skills in contexts of legal practice through the translation of a variety of legal documents. Introduces Spanish legal terminology in areas such as immigration, consumer protection, and criminal/employment/housing/family law. Students will learn how to apply these language and cultural skills as future legal practitioners interacting with clients who possess limited English proficiency. Native or fluent guest participants will expose students to legal terminology, registers, and dialects from various Spanish-speaking countries. The goal of the class is to enable students to, at a minimum, conduct intake interviews in a culturally competent fashion with Spanish-speaking clients without the assistance of interpreters. The course is designed to be beneficial for students with varying levels of Spanish language ability, up to and including students who are native or heritage speakers of Spanish. Taught in Spanish

0101	Jose Magro MWF 1:00pm - 1:50pm	Seats (Total: 20) ONLINE

SPAN374 **Spanish in the Community**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SPAN303; and (SPAN311 or SPAN316). Or permission of instructor. Credit only granted for: SPAN374 or SPAN359B. Formerly: SPAN359B.

Provides students with context for understanding, communicating with, and working with the Spanish-speaking community. Topics include Latino/a demographics, cultures, communities, work opportunities and local uses of Spanish. Requires outside service-learning work.

0101	Ana Rodriguez	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

SPAN375 **Spanish in the Life Sciences**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN303 and SPAN311; or SPAN316; or permission of instructor. Credit only granted for: SPAN359L or SPAN375. Formerly: SPAN359L.

Communication and critical thinking skills in Spanish through the study of materials related to science. The course engages students in class discussions about a variety of topics in different formats, such as book chapters, articles, film, art, and literary works. The course is divided into five units that will allow the study of specific geographies, topics, and cases in the Spanish-speaking world. Assignments include a research proposal and visits to the National Zoo and the National Museum of Natural History. No technical knowledge is necessary, as we will emphasize the language of science, not the content itself. Taught in Spanish.

0101	Daniela Bulansky	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

SPAN386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

SPAN399 **Independent Study in Spanish**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Specific readings in literature or a translation project under the supervision of a faculty member of the department.

Prerequisite: permission of department.

Contact department for information to register for this course.

SPAN401 **Advanced Composition I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN302; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Compositions and essays with emphasis on stylistics, idiomatic and syntactic structures. Organization and writing of research papers.

Contact department for information to register for this course.

SPAN402 **Advanced Composition II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN401; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Compositions and essays with emphasis on stylistics, idiomatic and syntactic structures. Organization and writing of research papers.

Contact department for information to register for this course.

SPAN408K **Special Topics in Iberian and Latin American Studies; Speaking Up/Out: Women Writers and Feminist Social Movements in Contemporary Latin America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

The feminist song The rapist is You - originally performed by the collective "Las Tesis" in Valparaiso (Chile) - has become a global hymn to protest violence against women. The performance was based on the work of anthropologist Rita Segato, whose studies have exposed power structures and the systematic violations of women s rights. By reading contemporary women writers, and by working on feminist social movements, we will explore what Segato has defined as the war against women.

0101	Laura Demaria	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ONLINE

SPAN408W **Special Topics in Iberian and Latin American Studies; Central Americans in the DMV (DC, Maryland, and Virginia)**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

This course explores the history, migration, and cultural representation of Central Americans in the DMV (DC, Maryland, and Virginia) in the larger context of the United States. We will ask how and why this region is home to one of the largest concentrations of Central Americans, especially Salvadorans, in the nation, as well as examine the diaspora as a transnational process. We will study novels, short stories, poetry, spoken word/performances, films, music, photography, zines, social media, and other interdisciplinary re/sources and engage one-on-one with local and international artists, activists, and community orgs. Students should expect to participate in a community engagement project. Taught in Spanish and discussions in Spanglish.

0101	Ana Rodriguez	Seats (Total: 25)
	TuTh 5:00pm - 6:15pm	ONLINE

SPAN408Y **Special Topics in Iberian and Latin American Studies; Contemporary Spanish Short Story**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409F **Great Themes of the Hispanic Literatures; Literary Myths and Philosophy in the European Tradition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409L **Great Themes of the Hispanic Literatures; 20th Century and Contemporary Latin American Short Story**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409O **Great Themes of the Hispanic Literatures; Images of Spain in Contemporary Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409W **Great Themes of the Hispanic Literatures; Women Writers of Spain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409X **Great Themes of the Hispanic Literatures; The Spanish Mystery Novel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409Y **Great Themes of the Hispanic Literatures; Filmmaking in Spain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN422 **Intercultural Communication and Negotiation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Prerequisite: SPAN370 OR SPAN371 OR SPAN373 OR SPAN 374. Restriction: Junior standing or higher.

Focuses on the relationship of language and culture of those operating in world markets. Particular attention will be given to intercultural communication, linguistic systems, culture specific perceptions of, and negotiation with, the Spanish-speaking world. Taught in Spanish.

0101	Elisa Gironzetti	Seats (Total: 25)
	MW 3:00pm - 4:15pm	ONLINE

SPAN425 **Hispanic Linguistics II: Structures of Spanish**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN303; and SPAN311 or SPAN316 or SPAN325.

This course begins with an introduction to general concepts in linguistics, from language function and the brain to communication, culture, and thought, and their relation to other disciplines in the social sciences. The main purpose of this course is to provide an overview of Hispanic linguistics through multiple perspectives, while exploring the areas of Spanish morphology, syntax, and semantics. This course will also focus on the structural tendencies of Spanish through a variety of practical activities. Taught in Spanish.

Jointly offered with SPAN625. Credit granted for SPAN425 or SPAN625.

0101	Juan Uriagereka	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	ONLINE

SPAN449D **Special Topics in Spanish Civilization; Culture, Clash and Society through Spain's Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

How has Spanish cinema, since its beginnings, portrayed Spanish society? What kind of cultural issues are at stake? How are class, etnia, gender, and/or national clashes depicted? Through a select number of Spanish films, from Surrealism to the most recent and successful box office hits, this course will attempt to expand the ongoing discussion on these pressing issues.

0101	Jose Naharro-Calderon	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

SPAN449J **Special Topics in Spanish Civilization; Mosaic: Jews, Muslims and the Spanish Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN449Z **Special Topics in Spanish Civilization; Barcelona/ Madrid: Literature & Film in the Contemporary City**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN460 **The Sublime and the Grotesque in Spanish Romantic Plays and the Visual Arts**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SPAN331, SPAN332, SPAN333, SPAN361, SPAN362, or SPAN363; or permission of instructor. Credit only granted for: SPAN408V OR SPAN460. Formerly: SPAN408V.

An exploration of the notions of the sublime and the grotesque in theatrical works as well as in the visual arts of the Romantic movement in Spain. Taught in Spanish.

0101	Mehl Penrose	Seats (Total: 25)
	TuTh 9:30am - 10:45am	ONLINE

SPAN462 **Twentieth Century Drama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

Significant plays of the twentieth century.

Contact department for information to register for this course.

SPAN463 **Latin American Drama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

Emphasis will be placed on Latin American plays of the twentieth century.

Contact department for information to register for this course.

SPAN464 **Contemporary Spanish Poetry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

Spanish poetry from the generation of 1927 to the present.

Contact department for information to register for this course.

SPAN469C **Study Abroad Special Topics IV; Composition**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN469D **Study Abroad Special Topics IV; Chilean History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN479 **Honors Thesis**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Researching and writing an honors thesis under the direction of a professor.

Contact department for information to register for this course.

SPAN495 **Honors Reading**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must be in Spanish and Portuguese Honors; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Supervised reading.

Contact department for information to register for this course.

SPAN605 **Teaching Spanish I**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must be a Spanish teaching assistant.

Methods and materials for teaching Spanish in higher education.

Restricted to SPAP graduate students or by permission of instructor only.

0101	Elisa Gironzetti M 5:00pm - 5:50pm Class time/details on ELMs	Seats (Total: 10) Location: TBA ONLINE

SPAN625 **Introduction to Hispanic Linguistics I:Basic Concepts**

Credits: 3 Grading Method: Regular, Audit

Introduction to basic terms and definition in Hispanic Linguistics. Fundamental aspects of phonology, morphology, syntax, semantics, sociolinguistics, and pragmatics.

Jointly offered with SPAN425. Credit granted for SPAN425 or SPAN625.

0101	Juan Uriagereka TuTh 3:30pm - 4:45pm	Seats (Total: 20) ONLINE

SPAN699 **Independent Study in Spanish**

Credits: 1-3 Grading Method: Regular, Audit

This course is designed to provide graduate students an opportunity to pursue independent study under the supervision of a member of the department.

Contact department for information to register for this course.

SPAN798O **Open Seminar; Literary and Critical Theory**

Credits: 3 Grading Method: Regular, Audit

Restricted to SPAP graduate students or by permission of instructor only. This course will introduce graduate students into some of the fundamental texts that shaped areas of theoretical meditation around topics such as language, representation and the specificity of the written text. Specifically, we would like to examine what it means to read, and think about reading experience. We will also discuss contemporary texts that have marked current critical debates. How the specificities of thought, language and literature appear within our texts?

0101	Juan Carlos Quintero-Herencia W 5:00pm - 7:30pm Class time/details on ELMs	Seats (Total: 10) Location: TBA ONLINE

SPAN798U **Open Seminar; Borges**

Credits: 3 Grading Method: Regular, Audit

Restricted to SPAP graduate students or by permission of instructor only. This seminar will analyze various lines of inquiry that emerge from Borges's work, starting with Fervor de Buenos Aires (1923) and running through his poetry and fiction, as well as from texts that were recovered after 1986 when he took up residence in Geneva.

0101	Saul Sosnowski	Seats (Total: 10)
	Th 5:00pm - 7:30pm	ONLINE

SPAN798V **Open Seminar; Religion, Love, and Politics in the Spanish Baroque**

Credits: 3 Grading Method: Regular, Audit

Restricted to SPAP graduate students or by permission of instructor only. This course is a panoramic survey on Spanish Baroque prose texts. We will study the images, ideas and beliefs, and the fictional and rhetorical strategies of political, religious and love texts of various genres: religious treatise; moral fantasy; picaresque novel; political treatise.

0101	Hernan De Pinillos	Seats (Total: 10)
	Tu 5:00pm - 7:30pm	ONLINE
	Restricted to SPAP graduate students or by permission of instructor only.	

SPAN799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

SPAN898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

SPAN899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

SPHL Public Health Fall 2020

SPHL100 **Foundations of Public Health**

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in SPHL-School of Public Health. Credit only granted for: SPHL100, PHSC300 or SPHL600.

An overview of the goals, functions, and methods of public health. After an introduction to the core concepts and tools used in public health research and practice, applications of these methodologies are considered in the context of current controversies/problems in public health. Students work together to develop strategies for prevention and control that take into consideration different points of view, outside research, and impacts on individuals and communities.

0101	Sylvette La Touche-Howard MW 10:00am - 10:50am F 8:00am - 8:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0102	Sylvette La Touche-Howard MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0103	Sylvette La Touche-Howard MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0104	Sylvette La Touche-Howard MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0105	Sylvette La Touche-Howard MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0106	Sylvette La Touche-Howard MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0107	Sylvette La Touche-Howard MW 10:00am - 10:50am F 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0108	Sylvette La Touche-Howard MW 10:00am - 10:50am F 3:00pm - 3:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0109	Sylvette La Touche-Howard MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

0110	Sylvette La Touche-Howard MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0201	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 8:00am - 8:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0202	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0203	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0204	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion
0205	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0206	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0207	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0208	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 3:00pm - 3:50pm	Seats (Total: 20) ONLINE ONLINE	 Discussion
0209	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

ESG1	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 10:00am - 10:50am	ONLINE	
	Th 10:30am - 11:20am	ONLINE	Discussion
	Restricted to Shady Grove students in the Public Health Science major.		

SPHL246 **Terp Restoration**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail

Restriction: Students must be undergraduate majors within the School of Public Health; and permission of instructor.

This lab course is designed to assist students in improving academic strategies, learning time management practices, interacting with the faculty and greater campus community, and developing professional career aspirations. The focus will be on an exploration of the academic environment, campus resources, self-discovery tools, and skill development. Utilizing an interactive experience through facilitated discussion that develops positive relationships, students will actively explore academic opportunities offered through the School of Public Health and the University of Maryland.

0101	Renee Stokes	Seats (Total: 22)
	M 12:00pm - 2:00pm	ONLINE

SPHL291 **Does Science Support Nontraditional Healing Practices?**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS, SCIS

Recommended: Successful completion of English composition course.

Does yoga improve the health of wounded warriors and/or breast cancer survivors? Can mindfulness enhance your business success and family relationships, or is it social media hype? Do you know what reflexology is, and does it help reduce your personal stress level? Increasing numbers of people are using nutritional supplements, meditation, yoga and other forms of exercise, acupuncture and experiences in nature to reduce stress levels and improve overall health and well-being. In the media, scientists to celebrities have alternately endorsed or rejected claims about how these and other nontraditional health practices benefit health and well-being. Students will sample some of these nontraditional health practices and explore whether these practices can enhance their own well-being. General scientific methods for health research will be introduced and students will use this knowledge to evaluate the existing scientific research on these practices. Students will also evaluate whether popular and media translation of scientific research on these practices is fact-based.

0101	Robin Puett	Seats (Total: 25)
	Tu 9:30am - 10:45am	ONLINE
	Th 9:30am - 10:45am	ONLINE

SPHL333 **Fundamentals of Undergraduate Teaching for Education Assistants and Mentors (UTEAM)**

Credits: 1 Grading Method: Regular, Pass-Fail

Corequisite: SPHL399. Restriction: Permission of the instructor; and permission of the School of Public Health. Additional information: This course must be taken concurrently with SPHL399 the first term in which a student is a UTA. Preference is given to students within an SPHL major.

Supports the professional and personal development of UG students in the UTEAM program. Must be completed concurrently with the first semester of providing UTEAM support to a specific course. UTEAM members are dedicated student learners who provide peer education support for specific course as part of the teaching team and emphasizes: 1) introduction to teaching, learning, literature and practice, 2) collaboration with other UTEAM members, faculty and staff as a learning community, and 3) reflection on the knowledge and skills developed through course participation.

0101	Cynthia Kershaw	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

SPHL399 **Academic Peer Teaching and Mentoring in Public Health**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

An independent study course for the Undergraduate Teaching and Mentoring (UTEAM) program within the School of Public Health. Students will apply evidence-based research while assisting peers with the understanding and application of course content. Specific responsibilities may vary dependent upon the course instructor. The primary roles of the UTEAM members will be to provide in-class support and/or external course support through review sessions, discussions sessions, laboratory support, group tutoring and office hours.

Contact department for information to register for this course.

SPHL600 **Foundations of Public Health**

Credits: 3 Grading Method: Regular

Restriction: Must be a graduate student within the School of Public Health. Credit only granted for: SPHL100, PHSC300 or SPHL600.

An overview of the goals, functions, and methods of public health. After an introduction to the core concepts and tools used in public health research and practice, applications of these methodologies are considered in the context of current controversies/problems in public health. Students work together to develop strategies for prevention and control that taken into consideration different points of view, outside research, and impacts on individuals and communities.

0101	Sylvette La Touche-Howard Class time/details on ELMs Th 3:00pm - 4:00pm	Seats (Total: 8) ONLINE ONLINE	Discussion

SPHL601 **Core Concepts in Public Health**

Credits: 1 Grading Method: Regular

Restriction: Must be a Master's of Public Health (MPH) or Master's of Health Administration (MHA) student within the School of Public Health.

Introduces students to the history, functions, systems, policies, and models of public health practice in the United States and globally. The course offers seminars, interactive activities, and assessments aimed at establishing a baseline understanding of public health necessary for higher level and integrative learning in subsequent public health courses.

0101	Barbara Curbow, Luisa Franzini, Dushanka Kleinman **Meets August 31, 2020 - October 16, 2020** M 6:30pm - 8:30pm	Seats (Total: 90) ONLINE
PLB1	Dushanka Kleinman, Barbara Curbow, Luisa Franzini **Meets October 19, 2020 - December 14, 2020** Class time/details on ELMs *Part of the MPH in Behavioral and Community Health program. Graduate students not admitted into this program must contact oes@umd.edu to determine registration eligibility.*	Seats (Total: 10) ONLINE
PLH1	Dushanka Kleinman, Luisa Franzini, Barbara Curbow **Meets October 19, 2020 - November 30, 2020** Class time/details on ELMs *Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 20) ONLINE

PLP1	Luisa Franzini, Dushanka Kleinman, Barbara Curbow **Meets October 19, 2020 - December 14, 2020** Class time/details on ELMs *Must be in online Health Administration program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 6) ONLINE
PWPB	Luisa Franzini, Dushanka Kleinman, Barbara Curbow **Meets October 19, 2020 - November 30, 2020** Class time/details on ELMs *Must be in Graduate Certificate in Principles of Public Health Program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 5) ONLINE

SPHL602 **Foundations of Epidemiology and Biostatistics**

Credits: 4 Grading Method: Regular

Recommended: Recommend SPHL603 as a co-requisite course. Restriction: Must be a graduate student within the School of Public Health. Credit only granted for: SPHL602 or EPIB610 and EPIB650.

An introduction to conceptual and practical tools from epidemiology and biostatistics that are necessary for the study of public health problems. Students learn epidemiologic concepts and methods, and basic statistical concepts and procedures used in public health research through applications, hands-on experience, and interpretations of statistical findings.

0101	Typhanye Dyer, Raul Cruz-Cano MW 4:15pm - 6:15pm	Seats (Total: 90) ONLINE
PLB1	Raul Cruz-Cano, Rodman Turpin Class time/details on ELMs *Part of the MPH in Behavioral and Community Health program. Graduate students not admitted into this program must contact oes@umd.edu to determine registration eligibility.*	Seats (Total: 10) ONLINE
PLH1	Rodman Turpin, Raul Cruz-Cano Class time/details on ELMs *Must be in Public Health Policy & practice Program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 20) ONLINE

PLP1	Raul Cruz-Cano, Rodman Turpin	Seats (Total: 6)	
	Class time/details on ELMs	ONLINE	
	Must be in online Health Administration program. For permission to enroll, contact oes@umd.edu.		
PWPB	Rodman Turpin, Raul Cruz-Cano	Seats (Total: 5)	
	Class time/details on ELMs	ONLINE	
	Must be in Graduate Certificate in Principles of Public Health Program. For permission to enroll, contact oes@umd.edu.		

SPHL603 **Public Health Data Laboratory**

Credits: 1 Grading Method: Regular

Corequisite: SPHL602. Restriction: Must be a graduate student within the School of Public Health.

An introduction to the statistical software necessary to implement the epidemiology and biostatistics concepts covered in the course EPIB 602, Foundations of Epidemiology and Biostatistics through hands-on exercises.

0101	Raul Cruz-Cano	Seats (Total: 23)	
	W 6:30pm - 7:30pm	ONLINE	Lab
0102	Raul Cruz-Cano	Seats (Total: 23)	
	W 6:30pm - 7:30pm	ONLINE	Lab
0103	Raul Cruz-Cano	Seats (Total: 23)	
	W 7:30pm - 8:30pm	ONLINE	Lab
0104	Raul Cruz-Cano	Seats (Total: 23)	
	W 7:30pm - 8:30pm	ONLINE	Lab
PLB1	Raul Cruz-Cano	Seats (Total: 10)	
	Class time/details on ELMs	ONLINE	Lab
	Part of the MPH in Behavioral and Community Health program. Graduate students not admitted into this program must contact oes@umd.edu to determine registration eligibility.		
PLH1	Raul Cruz-Cano	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	Lab
	Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.		

PLP1	Raul Cruz-Cano	Seats (Total: 6)	
	Class time/details on ELMs	ONLINE	Lab
	Must be in online Health Administration program. For permission to enroll, contact oes@umd.edu.		
PWPB	Raul Cruz-Cano	Seats (Total: 5)	
	Class time/details on ELMs	ONLINE	Lab
	Must be in Graduate Certificate in Principles of Public Health Program. For permission to enroll, contact oes@umd.edu.		

SPHL612 **Research Ethics**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be a graduate student in the School of Public Health. Credit only granted for: EPIB641, KNES689Y or SPHL612. Formerly: EPIB641, KNES689Y.

Overview and discussion of ethical issues that face public health researchers.

0101	Stephen Roth	Seats (Total: 12)
	Meets August 31, 2020 - October 16, 2020	
	F 9:00am - 10:50am	ONLINE

SPHL620 **Leadership, Teams, and Coalitions: Policy to Advocacy**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed SPHL610. Restriction: Must be a graduate student in the School of Public Health.

Students learn team building, leadership, and advocacy skills through the development and presentation of a policy brief on an urgent public health issue. The class will use a combination of brief lectures, discussions, and planned activities on how to develop a policy briefing. Students will have an inter-professional experience during which they will discuss possible approaches to developing policies on their public health issues while practicing team building skills. Class will culminate with presentation of policy briefs through a persuasive advocacy speech.

0101	Priscilla Novak	Seats (Total: 75)
	M 6:45pm - 8:45pm	ONLINE

PLH1	Sherry Maykrantz	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.		

STAT Statistics and Probability Fall 2020

STAT100 **Elementary Statistics and Probability**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: MS | General Education: FSAR, FSMA

Prerequisite: MATH110, MATH112, MATH113, or MATH115; or permission of CMNS-Mathematics department; or must have math eligibility of STAT100 or higher and math eligibility is based on the Math Placement Exam or the successful completion of Math 003 with appropriate eligibility. Restriction: Must not have completed MATH111; or must not have completed any MATH or STAT course with a prerequisite of MATH141. Credit only granted for: STAT100, MATH107 or MATH111.

Simplest tests of statistical hypotheses; applications to before-and-after and matched pair studies. Events, probability, combinations, independence. Binomial probabilities, confidence limits. Random variables, expected values, median, variance. Tests based on ranks. Law of large numbers, normal approximation. Estimates of mean and variance.

0111	Matthew Griffin	Seats (Total: 31)	
	MWF 12:00pm - 12:50pm	ONLINE	
	M 8:00am - 9:15am	ONLINE	Discussion
0112	Matthew Griffin	Seats (Total: 31)	
	MWF 12:00pm - 12:50pm	ONLINE	
	M 9:30am - 10:45am	ONLINE	Discussion
0121	Matthew Griffin	Seats (Total: 31)	
	MWF 12:00pm - 12:50pm	ONLINE	
	Tu 8:00am - 9:15am	ONLINE	Discussion
0122	Matthew Griffin	Seats (Total: 31)	
	MWF 12:00pm - 12:50pm	ONLINE	
	Tu 9:30am - 10:45am	ONLINE	Discussion
0123	Matthew Griffin	Seats (Total: 30)	
	MWF 12:00pm - 12:50pm	ONLINE	
	Tu 11:00am - 12:15pm	ONLINE	Discussion

0131	Matthew Griffin MWF 12:00pm - 12:50pm W 8:00am - 9:15am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0132	Matthew Griffin MWF 12:00pm - 12:50pm W 9:30am - 10:45am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0141	Matthew Griffin MWF 12:00pm - 12:50pm Th 8:00am - 9:15am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0211	Susan Mazzullo MWF 2:00pm - 2:50pm M 8:00am - 9:15am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0212	Susan Mazzullo MWF 2:00pm - 2:50pm M 9:30am - 10:45am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0213	Susan Mazzullo MWF 2:00pm - 2:50pm M 11:00am - 12:15pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0214	Susan Mazzullo MWF 2:00pm - 2:50pm M 12:30pm - 1:45pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0221	Susan Mazzullo MWF 2:00pm - 2:50pm Tu 8:00am - 9:15am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0222	Susan Mazzullo MWF 2:00pm - 2:50pm Tu 9:30am - 10:45am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0223	Susan Mazzullo MWF 2:00pm - 2:50pm Tu 11:00am - 12:15pm	Seats (Total: 31) ONLINE ONLINE	 Discussion

0224	Susan Mazzullo MWF 2:00pm - 2:50pm Tu 12:30pm - 1:45pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0311	Matthew Griffin MWF 10:00am - 10:50am M 11:00am - 12:15pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0321	Matthew Griffin MWF 10:00am - 10:50am W 8:00am - 9:15am	Seats (Total: 31) ONLINE ONLINE	 Discussion
0323	Matthew Griffin MWF 10:00am - 10:50am W 11:00am - 12:15pm	Seats (Total: 31) ONLINE ONLINE	 Discussion
0331	Matthew Griffin MWF 10:00am - 10:50am Th 8:00am - 9:15am	Seats (Total: 32) ONLINE ONLINE	 Discussion
FC01	Valeriia Cherepanova MW 3:00pm - 4:15pm Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 35) ONLINE ONLINE	 Discussion
FC02	Valeriia Cherepanova MW 3:00pm - 4:15pm Th 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 35) ONLINE ONLINE	 Discussion

STAT386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Must have learning proposal approved by the CMNS-Mathematics Department.

2801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
3903	Antoine Mellet Contact instructor or department for details.	Seats (Total: 10)

5001	Paul Smith Contact instructor or department for details.	Seats (Total: 10)	

STAT400 **Applied Probability and Statistics I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH131, MATH141); or students who have taken courses with comparable content may contact the department. Credit only granted for: BMGT231, ENEE324, or STAT400. Additional information: Not acceptable toward graduate degrees in MATH/STAT/AMSC.

Random variables, standard distributions, moments, law of large numbers and central limit theorem. Sampling methods, estimation of parameters, testing of hypotheses.

0111	Susan Mazzullo MWF 12:00pm - 12:50pm Tu 9:30am - 10:20am	Seats (Total: 33) ONLINE ONLINE	 Discussion
0112	Susan Mazzullo MWF 12:00pm - 12:50pm Tu 9:30am - 10:20am	Seats (Total: 33) ONLINE ONLINE	 Discussion
0113	Susan Mazzullo MWF 12:00pm - 12:50pm Tu 9:30am - 10:20am	Seats (Total: 33) ONLINE ONLINE	 Discussion
0121	Susan Mazzullo MWF 12:00pm - 12:50pm Tu 12:30pm - 1:20pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0122	Susan Mazzullo MWF 12:00pm - 12:50pm Tu 12:30pm - 1:20pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0123	Susan Mazzullo MWF 12:00pm - 12:50pm Tu 12:30pm - 1:20pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0131	Susan Mazzullo MWF 12:00pm - 12:50pm Tu 3:30pm - 4:20pm	Seats (Total: 33) ONLINE ONLINE	 Discussion

0132	Susan Mazzullo MWF 12:00pm - 12:50pm Tu 3:30pm - 4:20pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0133	Susan Mazzullo MWF 12:00pm - 12:50pm Tu 3:30pm - 4:20pm	Seats (Total: 33) ONLINE ONLINE	 Discussion
0211	Hatice Sahinoglu MWF 1:00pm - 1:50pm Th 9:30am - 10:20am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0212	Hatice Sahinoglu MWF 1:00pm - 1:50pm Th 9:30am - 10:20am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0213	Hatice Sahinoglu MWF 1:00pm - 1:50pm Th 9:30am - 10:20am	Seats (Total: 30) ONLINE ONLINE	 Discussion
0221	Hatice Sahinoglu MWF 1:00pm - 1:50pm Th 12:30pm - 1:20pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0222	Hatice Sahinoglu MWF 1:00pm - 1:50pm Th 12:30pm - 1:20pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0223	Hatice Sahinoglu MWF 1:00pm - 1:50pm Th 12:30pm - 1:20pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0231	Hatice Sahinoglu MWF 1:00pm - 1:50pm Th 3:30pm - 4:20pm	Seats (Total: 30) ONLINE ONLINE	 Discussion
0232	Hatice Sahinoglu MWF 1:00pm - 1:50pm Th 3:30pm - 4:20pm	Seats (Total: 30) ONLINE ONLINE	 Discussion

0233	Hatice Sahinoglu MWF 1:00pm - 1:50pm Th 3:30pm - 4:20pm	Seats (Total: 30) ONLINE ONLINE	Discussion
0311	Jonathan Fernandes TuTh 2:00pm - 3:15pm W 8:00am - 8:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0312	Jonathan Fernandes TuTh 2:00pm - 3:15pm W 8:00am - 8:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0313	Jonathan Fernandes TuTh 2:00pm - 3:15pm W 8:00am - 8:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0321	Jonathan Fernandes TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0322	Jonathan Fernandes TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0323	Jonathan Fernandes TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 30) ONLINE ONLINE	Discussion
0331	Jonathan Fernandes TuTh 2:00pm - 3:15pm W 11:00am - 11:50am	Seats (Total: 31) ONLINE ONLINE	Discussion
0332	Jonathan Fernandes TuTh 2:00pm - 3:15pm W 11:00am - 11:50am	Seats (Total: 31) ONLINE ONLINE	Discussion
0333	Jonathan Fernandes TuTh 2:00pm - 3:15pm W 11:00am - 11:50am	Seats (Total: 31) ONLINE ONLINE	Discussion

STAT401 **Applied Probability and Statistics II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (STAT400, STAT410). Additional information: Not acceptable toward graduate degrees in MATH/STAT/AMSC.

Point estimation - unbiased and consistent estimators. Interval estimation. Minimum variance and maximum likelihood estimators. Testing of hypotheses. Regression, correlation and analysis of variance. Sampling distributions. Elements of non-parametric methods.

0111	Archana Khurana MWF 10:00am - 10:50am Th 8:00am - 8:50am	Seats (Total: 27) ONLINE ONLINE	 Discussion
0112	Archana Khurana MWF 10:00am - 10:50am Th 9:00am - 9:50am	Seats (Total: 27) ONLINE ONLINE	 Discussion
0113	Archana Khurana MWF 10:00am - 10:50am Th 10:00am - 10:50am	Seats (Total: 27) ONLINE ONLINE	 Discussion
0201	Natalia Tchetcherina MWF 11:00am - 11:50am	Seats (Total: 28) ONLINE	
0301	Natalia Tchetcherina MWF 12:00pm - 12:50pm	Seats (Total: 28) ONLINE	
0401	Archana Khurana MWF 2:00pm - 2:50pm	Seats (Total: 32) ONLINE	
0601	Joan Ren TuTh 11:00am - 12:15pm	Seats (Total: 28) ONLINE	

STAT410 **Introduction to Probability Theory**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241). Cross-listed with SURV410. Credit only granted for: STAT410 or SURV410.

Probability and its properties. Random variables and distribution functions in one and several dimensions. Moments. Characteristic functions. Limit theorems.

0101	Scott Preston MWF 9:00am - 9:50am	Seats (Total: 31) ONLINE
0301	Scott Preston MWF 2:00pm - 2:50pm	Seats (Total: 31) ONLINE
0401	Christian Zickert TuTh 9:30am - 10:45am	Seats (Total: 34) ONLINE
0501	Guangyu Xi TuTh 2:00pm - 3:15pm	Seats (Total: 31) ONLINE
0601	Dmitry Dolgopyat TuTh 12:30pm - 1:45pm	Seats (Total: 31) ONLINE
0701	Jacob Bedrossian MWF 10:00am - 10:50am	Seats (Total: 31) ONLINE

STAT420 **Theory and Methods of Statistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (SURV410, STAT410). Cross-listed with SURV420. Credit only granted for: STAT420 or SURV420.

Point estimation, sufficiency, completeness, Cramer-Rao inequality, maximum likelihood. Confidence intervals for parameters of normal distribution. Hypothesis testing, most powerful tests, likelihood ratio tests. Chi-square tests, analysis of variance, regression, correlation. Nonparametric methods.

0101	Jian Lun Xu TuTh 5:00pm - 6:15pm	Seats (Total: 35) ONLINE

STAT426 **Introduction to Data Science and Machine Learning**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in MATH241 or MATH340; and minimum grade of C- in MATH240, MATH461 or MATH341; and minimum grade of C- in STAT400 or STAT410; students who have taken courses with content comparable to STAT400/410 may request permission of the instructor. Credit only granted for: STAT426 or CMSC320.

An introductory course to the recent developments in the fields of data science and machine learning. Emphasis will be given to mathematical and statistical understanding of commonly used methods and processes.

0101	Scott Preston MWF 1:00pm - 1:50pm	Seats (Total: 34) ONLINE

STAT430 **Introduction to Statistical Computing with SAS**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (STAT400, STAT410).

Descriptive and inferential statistics. SAS software: numerical and graphical data summaries; merging, sorting and splitting data sets. Least squares, regression, graphics and informal diagnostics, interpreting results. Categorical data, lifetime data, time series. Applications to engineering, life science, business and social science.

0101	Hatice Sahinoglu MWF 9:00am - 9:50am	Seats (Total: 35) ONLINE
0201	Hatice Sahinoglu MWF 10:00am - 10:50am	Seats (Total: 35) ONLINE
0301	Timothy Pilachowski MWF 1:00pm - 1:50pm	Seats (Total: 35) ONLINE
0401	Gustavo Varela Alvarenga TuTh 3:30pm - 4:45pm	Seats (Total: 35) ONLINE
0501	Christine Nickel TuTh 5:00pm - 6:15pm	Seats (Total: 35) ONLINE

STAT440 **Sampling Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (STAT401, STAT420). Credit only granted for: STAT440 or SURV440.

Simple random sampling. Sampling for proportions. Estimation of sample size. Sampling with varying probabilities. Sampling: stratified, systematic, cluster, double, sequential, incomplete.

0101	Natalia Tchetcherina MWF 2:00pm - 2:50pm	Seats (Total: 35) ONLINE

STAT464 **Introduction to Biostatistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed one semester of calculus. Restriction: Junior standing or higher. Credit only granted for: BIOE372 or STAT464. Additional information: Not acceptable toward degrees in MATH/STAT.

Probabilistic models. Sampling. Some applications of probability in genetics. Experimental designs. Estimation of effects of treatments. Comparative experiments. Fisher-Irwin test. Wilcoxon tests for paired comparisons.

0101	Raluca Rosca MWF 11:00am - 11:50am	Seats (Total: 34) ONLINE

STAT470 **Actuarial Mathematics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241). Recommended: STAT400.

Major mathematical ideas involved in calculation of life insurance premiums, including compound interest and present valuation of future income streams; probability distribution and expected values derived from life tables; the interpolation of probability distributions from values estimated at one-year multiples; the 'Law of Large Numbers' describing the regular probabilistic behavior of large populations of independent individuals; and the detailed calculation of expected present values arising in insurance problems.

0101	Susan Mazzullo MWF 10:00am - 10:50am	Seats (Total: 44) ONLINE
0201	Matthew Griffin MWF 2:00pm - 2:50pm	Seats (Total: 40) ONLINE

STAT498A **Selected Topics in Statistics**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduate students will be offered occasionally under the general guidance of the MATH/STAT major committee. Students register for reading in statistics under this number.

Contact department for information to register for this course.

STAT600 **Probability Theory I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT410.

Probability space; distribution functions and densities; Poissson limit theoreom; de Moivre-Laplace theorem; measure-theoretic definition of expectation; classification of measures on R; convergence of random variables; Radon-Nikodym theorem;LP spaces; conditional probabilities; independence of events, sigma-algebras and random variables; Bayes' theo rem; pi-systems and Dynkin systems; discrete Markov chains; random walks; gambler's ruin problem; Markov chains on a general phase space; Borel-cantelli lemmas; Kolmogorov inequality; three series theorem; laws of large numbers.

0101	Leonid Koralov	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ONLINE

STAT689 **Research Interactions in Statistics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

The students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) research group. Format varies, but includes regular meetings, readings and presentations of material. See graduate program's online syllabus or contact the graduate program director for more information.

Contact department for information to register for this course.

STAT700 **Mathematical Statistics I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT410; or students who have taken courses with comparable content may contact the department.

Sampling distributions including noncentral chi-squared, t, F. Exponential families, completeness. Sufficiency, factorization, likelihood ratio. Decision theory, Bayesian methods, minimax principle. Point estimation. Lehmann-Scheffe and Cramer-Rao theorems. Set estimation.

Offered fall only.

0101	Joan Ren	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ONLINE

STAT702 **Survival Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT410 and STAT420; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Concepts/definitions of survival functions, hazard rate or hazard function, cumulative hazard functions, mean residual life, inversion formulas; Parametric models: exponential distribution, Weibull distribution; Censored/incomplete data and real data examples; right censored data, doubly censored data, interval censored data, truncated data; Nonparametric maximal likelihood estimator for the lifetime distribution under different types of censoring (e.g., Kaplan-Meier estimator), self-consistency estimators, the EM algorithm, applications of the empirical likelihood; Semiparametric models: accelerated lifetime model, proportional hazard model, the Cox model; Goodness of fit tests and diagnostic methods for model checking.

0101	Takumi Saegusa	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	ONLINE

STAT705 **Computational Statistics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT700 or STAT420. Recommended: Have some programming experience (any language). Credit only granted for: STAT705 or STAT798C. Formerly: STAT798C.

Modern methods of computational statistics and their application to both practical problems and research. S-Plus and SAS programming with emphasis on S-Plus. S-Plus objects and functions, and SAS procedures. Topics include data management and graphics, Monte Carlo and simulation, bootstrapping, numerical optimization in statistics, linear and generalized linear models, nonparametric regression, time series analysis.

0101	Vincent Lyzinski	Seats (Total: 20)
	MWF 1:00pm - 1:50pm	ONLINE

STAT740 **Linear Statistical Models I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT700 or STAT420.

Least squares, general linear models, estimability and Gauss-Markov theorem. Simple and multiple linear regression, analysis of residuals and diagnostics, polynomial models, variable selection. Qualitative predictors, one and two way analysis of variance, multiple comparisons, analysis of covariance. Nonlinear least squares. High-level statistical computer software will be used for data analysis throughout the course.

0101	Paul Smith	Seats (Total: 20)
	MWF 2:00pm - 2:50pm	ONLINE

STAT770 **Analysis of Categorical Data**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT430 and STAT420; or permission of CMNS-Mathematics department.

Loglinear and logistic models. Single classification, two-way classification; contingency tables; tests of homogeneity and independence models, measures of association, distribution theory. Bayesian methods. Incomplete contingency tables. Square contingency tables - symmetry. Extensions to higher dimensional contingency tables.

0101	Eric Slud	Seats (Total: 20)
	MW 5:00pm - 6:15pm	ONLINE

STAT799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

STAT808A **Selected Topics in Probability**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

STAT818A **Selected Topics in Statistics**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

STAT898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

STAT899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

SURV Survey Methodology Fall 2020

SURV400 **Fundamentals of Survey and Data Science**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: STAT100; or permission of BSOS-Joint Program in Survey Methodology department. Restriction: Course open to SURV certificate students, SURV Advanced Special Students, and SURV undergraduate minors. Graduate students from other departments may enroll with permission from the department. Credit only granted for: SURV699M or SURV400. Formerly: SURV699M.

The course introduces the student to a set of principles of survey and data science that are the basis of standard practices in these fields. The course exposes the student to key terminology and concepts of collecting and analyzing data from surveys and other data sources to gain insights and to test hypotheses about the nature of human and social behavior and interaction. It will also present a framework that will allow the student to evaluate the influence of different error sources on the quality of data.

PLS1	Alexander Wenz	Seats (Total: 15)
	Meets September 7, 2020 - November 23, 2020	
	M 1:00pm - 2:00pm	ONLINE
	Contact instructor or department for details.	
	To apply for permission and to request a seat, click here.	

SURV410 **Introduction to Probability Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH240, MATH341, or MATH461; and (MATH241 or MATH340). Cross-listed with STAT410. Credit only granted for: STAT410 or SURV410.

Probability and its properties. Random variables and distribution functions in one and several dimensions. Moments. Characteristic functions. Limit theorems.

0101	Scott Preston MWF 9:00am - 9:50am	Seats (Total: 31) ONLINE
0401	Christian Zickert TuTh 9:30am - 10:45am	Seats (Total: 34) ONLINE
0501	Guangyu Xi TuTh 2:00pm - 3:15pm	Seats (Total: 31) ONLINE
0601	Dmitry Dolgopyat TuTh 12:30pm - 1:45pm	Seats (Total: 31) ONLINE
0701	Jacob Bedrossian MWF 10:00am - 10:50am	Seats (Total: 31) ONLINE

SURV615 **Statistical Modeling I**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed a two course sequence in probability and statistics; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Survey Methodology (Master's) program; or permission of instructor.

First course in a two term sequence in applied statistical methods covering topics such as regression, analysis of variance, categorical data, and survival analysis.

It runs concurrently with the University of Michigan course.

0101	Sunghee Lee **Meets August 31, 2020 - December 11, 2020** W 5:00pm - 7:45pm	Seats (Total: 20) ONLINE

SURV617 **Applications of Statistical Modeling**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SURV615 and SURV616; or permission of instructor. Credit only granted for: SURV617, SURV746, or SURV699R. Formerly: SURV699R and SURV746.

Designed for students on both the social science and statistical tracks for the two programs in survey methodology, will provide students with exposure to applications of more advanced statistical modeling tools for both substantive and methodological investigations that are not fully covered in other MPSM or JPSM courses. Modeling techniques to be covered include multilevel modeling (with an application to methodological studies of interviewer effects), structural equation modeling (with an application of latent class models to methodological studies of measurement error), classification trees (with an application to prediction of response propensity), and alternative models for longitudinal data (with an application to panel survey data from the Health and Retirement Study). Discussions and examples of each modeling technique will be supplemented with methods for appropriately handling complex sample designs when fitting the models. The class will focus on practical applications and software rather than extensive theoretical discussions.

0101	Yajuan Si	Seats (Total: 20)
	Meets August 31, 2020 - December 11, 2020	
	F 10:00am - 12:45pm	ONLINE

SURV621 **Fundamentals of Data Collection I**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

First semester of a two-semester sequence that provides a broad overview of the processes that generate data for use in social science research. Students will gain an understanding of different types of data and how they are created, as well as their relative strengths and weaknesses. A key distinction is drawn between data that are designed, primarily survey data, and those that are found, such as administrative records, remnants of online transactions, and social media content. The course combines lectures, supplemented with assigned readings, and practical exercises. In the first semester, the focus will be on the error that is inherent in data, specifically errors of representation and errors of measurement, whether the data are designed or found. The psychological origins of survey responses are examined as a way to understand the measurement error that is inherent in answers. The effects of the mode of data collection (e.g., mobile web versus telephone interview) on survey responses also are examined.

0101	Frederick Conrad, Christopher Antoun	Seats (Total: 25)
	M 3:30pm - 6:30pm	ONLINE

SURV624 **Privacy Law**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

To acquaint the students with the origins and basic principles of privacy law mainly in Europe. Furthermore, it will contrast the European privacy foundations with the U.S. approach. At the core of this course stands the new European General Data Protection Regulation (GDPR) and its applicability to specific cases and basic principles. Moreover, the course will cover current challenges to the existing privacy paradigms by big data and big data analytics.

PLS1	Thomas Fetzer **Meets September 2, 2020 - September 23, 2020** W 12:00pm - 1:00pm Contact instructor or department for details. *To apply for permission and to request a seat, click here.*	Seats (Total: 15) ONLINE

SURV626 **Sampling**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: Permission of BSOS-Joint Program in Survey Methodology department; and must have completed an introductory graduate level statistics course covering material through OLS and logistic regression.

Practical aspects of sample design. The course will cover the main techniques used in sampling practice: simple random sampling, stratification, systematic selection, cluster sampling, multistage sampling, and probability proportional to size sampling. The course will also cover sampling frames, cost models, and sampling error (variance) estimation techniques.

PLS1	Raphael Nishimura **Meets October 1, 2020 - December 3, 2020** Th 1:00pm - 2:00pm Contact instructor or department for details. *To apply for permission and to request a seat, click here.*	Seats (Total: 9) ONLINE
PLS2	Raphael Nishimura **Meets September 30, 2020 - December 2, 2020** W 7:00pm - 8:00pm Contact instructor or department for details. *To apply for permission and to request a seat, click here.*	Seats (Total: 15) ONLINE

SURV632 **Cognition, Communication and Survey Measurement**

Credits: 3

Grading Method: Regular, Audit

Major sources of survey error-such as reporting errors and nonresponse bias-from the perspective of social and cognitive psychology and related disciplines. Topics: psychology of memory and its bearing on classical survey issues (e.g., underreporting and telescoping); models of language use and their implications for the interpretation and misinterpretation of survey questions; and studies of attitudes, attitude change, and their possible application to increasing response rates and improving the measurement of opinions. Theories and findings from the social and behavioral sciences will be explored.

Restricted to SURV majors only.

0101	Frederick Conrad	Seats (Total: 15)
	Meets August 31, 2020 - December 11, 2020	
	W 9:00am - 11:45am	ONLINE

SURV650 **Economic Measurement**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Must have completed a course in intermediate microeconomics. Credit only granted for: SURV650 or SURV699L. Formerly: SURV699L.

An introduction to the field of economic measurement. Sound economic data are of critical importance to policymakers, the business community, and others. Emphasis is placed on the economic concepts that underlie key economic statistics and the translation of those concepts into operational measures. Topics addressed include business survey sampling; the creation of business survey sampling frames; the collection of data from businesses; employment and earnings statistics; price statistics; output and productivity measures; the national accounts; and the statistical uses of administrative data. Lectures and course readings assume prior exposure to the tools of economic analysis.

SV01	Katharine Abraham	Seats (Total: 24)
	Meets August 31, 2020 - December 11, 2020	
	Tu 9:00am - 11:40am	ONLINE

SURV673 **Introduction to Python and SQL**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Recommended: Background knowledge in programming in Python and SQL structures.

Basics of Python and SQL for data analysis.Students will explore real publicly-available datasets, using the data analysis toolsin Python to create summaries and generate visualizations. Students will learn thebasics of database management and organization, as well as learn how to code inSQL and work with PostgreSQL databases. By the end of the class, students shouldunderstand how to read in data from CSV files or from the internet and becomfortable using either SQL or Python to aggregate, summarize, describe, andvisualize these datasets.

PLS1	Brian Kim **Meets September 9, 2020 - September 30, 2020** W 1:00pm - 2:00pm Contact instructor or department for details. *To apply for permission and to request a seat, click here.*	Seats (Total: 20) ONLINE

SURV699 **Special Topics in Survey Methodology; Reading in Survey Methodology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

0101	Frederick Conrad Contact instructor or department for details.	Seats (Total: 10)
0301	Stanley Presser Contact instructor or department for details.	Seats (Total: 10)

SURV699A **Special Topics in Survey Methodology; Ethical considerations**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

PLS1	Jessica Vitak **Meets September 24, 2020 - October 15, 2020** Th 12:00pm - 1:00pm Contact instructor or department for details. *To apply for permission and to request a seat, click here.*	Seats (Total: 15) ONLINE

SURV699G **Special Topics in Survey Methodology; Official Statistics**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

PLS1	Instructor: TBA	Seats (Total: 8)
	Meets November 2, 2020 - November 23, 2020	
	M 12:00pm - 1:00pm Contact instructor or department for details.	ONLINE
	To apply for permission and to request a seat, click here.	

SURV699U **Special Topics in Survey Methodology; Machine Learning for Social Science**

Credits: 3

Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

Prerequisite: Students should work through one or more R tutorials prior or during the first weeks of class due to the short introduction to R presented in the class. Some resources can be found at the following: https://www.rstudio.com/online-learning/#R, https://cran.r-project.org/manuals.html, or http://www.statmethods.net. Provides an introduction to supervised statistical learning techniques such as decision trees, random forests and boosting and discusses their potential application in the social sciences. These methods focus on predicting an outcome Y based on some data-driven function f(X) and therefore facilitate new research perspectives in comparison with traditional regression models, which primarily focus on causation. Predictive methods also provide a valuable extension to the empirical social scientists' toolkit as new data sources become more prominent. In addition to introducing supervised learning methods, the course will include practical sessions to exemplify how to tune and evaluate prediction models using the statistical programming language R.

0101	Brian Kim	Seats (Total: 30)
	Meets September 8, 2020 - December 15, 2020	
	Tu 2:00pm - 3:00pm Contact instructor or department for details.	ONLINE

SURV699Y **Special Topics in Survey Methodology; Modern Workflows in Data Science**

(Perm req)

Credits: 2

Grading Method: Regular, Audit, Sat-Fail

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

Large data, fast pace of production, and collaboration are hallmarks of the new data environment. In this context, researchers must have a good understanding of data workflows and they must ensure consistent and reproducible practices in order to collaborate and consistently produce insights. This course deals with some of these essential topics. We will discuss the main types of workflows in data and survey sciences and how tools such as GitHub can enhance collaboration and insure reproducibility. We will also discuss the use of reproducible documents such as Rmarkdown or Jupyter Notebooks before covering how to work with distributed data using Spark. We will finish the course by discussing the use of dashboards and how to develop such tools using R Shiny.

PLS1	Alexandru Cernat	Seats (Total: 15)
	Meets September 22, 2020 - November 17, 2020	
	Tu 3:00pm - 4:00pm Contact instructor or department for details.	ONLINE
	To apply for permission and to request a seat, click here.	

SURV720 **Total Survey Error and Data Quality I**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: SURV625. Restriction: Permission of instructor. Credit only granted for: (SURV720 and SURV721) or SURV723. Formerly: SURV723.

Total error structure of sample survey data, reviewing current research findings on the magnitudes of different error sources, design features that affect their magnitudes, and interrelationships among the errors. Coverage, nonresponse, sampling, measurement, and postsurvey processing errors. For each error source reviewed, social science theories about its causes and statistical models estimating the error source are described. Empirical studies from the survey methodological literature are reviewed to illustrate the relative magnitudes of error in different designs. Emphasis on aspects of the survey design necessary to estimate different error sources. Relationships to show how attempts to control one error source may increase another source. Attempts to model total survey error will be presented.

It runs concurrently with the University of Michigan course.

0101	Christopher Antoun	Seats (Total: 20)
	Meets August 31, 2020 - December 11, 2020	
	Th 10:20am - 12:15pm	ONLINE

SURV725 **Item Nonresponse and Imputation**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Prerequisite: Be comfortable with generalized linear models and basic probability theory through coursework or work experience; and familiarity with the statistical software R. Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

Missing data are a common problem which can lead to biased results if the missingness is not taken into account at the analysis stage. Imputation is often suggested as a strategy to deal with item nonresponse allowing the analyst to use standard complete data methods after the imputation. However, several misconceptions about the aims and goals of imputation make some users skeptical about the approach. In this course we will illustrate why thinking about the missing data is important and clarify which goals a useful imputation method should try to achieve.

PLS1	Joerg Drechsler	Seats (Total: 9)
	Meets November 13, 2020 - December 4, 2020	
	F 8:00am - 9:00am Contact instructor or department for details.	ONLINE
	To apply for permission and to request a seat, click here.	

SURV727 **Fundamentals of Computing and Data Display**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major within the BSOS-Joint Program in Survey Methodology department; or permission of BSOS-Joint Program in Survey Methodology department. Additional information: Students without any R knowledge are encouraged to work through one or more R web tutorials prior or during the first weeks of the course.

The first part of this course provides an introduction to web scraping and APIs for gathering data from the web and then discusses how to store and manage (big) data from diverse sources efficiently. The second part of the course demonstrates techniques for exploring and finding patterns in (non-standard) data, with a focus on data visualization. The course focuses on R as the primary computing environment, with excursus into SQL and Big Data processing tools.

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0101	Ruben Bach	Seats (Total: 20)
	M 12:30pm - 3:00pm	ONLINE

SURV740 **Fundamentals of Inference**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SURV410 and SURV420; or (SURV615 and SURV616); or permission of Instructor required. Restriction: Must be in a major within the BSOS-Joint Program in Survey Methodology department; or permission of BSOS-Joint Program in Survey Methodology department.

Focuses on the fundamentals of statistical inference in the finite population setting. Overview and review fundamental ideas of making inferences about populations. Basic principles of probability sampling; focus on differences between making predictions and making inferences; explore the differences between randomized study designs and observational studies; consider model-based vs. design-based analytic approaches; review techniques designed to improve efficiency using auxiliary information; and consider non-probability sampling and related inferential techniques.

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0101	Sunghee Lee, Partha Lahiri	Seats (Total: 20)
	Meets August 31, 2020 - December 11, 2020	
	F 1:00pm - 4:00pm	ONLINE

SURV829 **Doctoral Research Seminar in Survey Methodology**

Credits: 3-6 Grading Method: Sat-Fail

An advanced research seminar for students preparing to do research or take doctoral comprehensive examinations.

0101	Katharine Abraham, Brady West	Seats (Total: 10)
	Meets August 31, 2020 - December 11, 2020	
	W 2:00pm - 4:30pm	ONLINE

SURV898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

SURV899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

TDPS Theatre, Dance and Performance Studies Fall 2020

TDPS201 **Introduction to Technical Production**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major within the ARHU-Dance department; or must be in a major within the ARHU-Theatre department. Credit only granted for: DANC210 and THET114 or TDPS201. Formerly: DANC210 and THET114.

Students are provided with an overview of topics related to the technical production of theatre and dance including: scenic, prop and costume construction, lighting, sound and video execution and management structures.

Students must pay a $25.00 lab fee.

5501	Michael Driggers	Seats (Total: 20)	
	MW 4:00pm - 4:50pm	ONLINE	
	F 3:30pm - 5:30pm	ONLINE	Lab

TDPS258C **Special Topics in Introductory Performing Arts; Cultural Institutions in the United States**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Designed for performing arts students. Offers instruction at the introductory level in various aspects of performance such as Voice for the Performing Arts, Movement for the Performing Arts, Acting for the Performing Arts, Partner Dance and a myriad of specific aspects within these genres.

Cross-listed with ARHU240. Credit granted for TDPS258C or ARHU240.

0101	Janet Schroeder	Seats (Total: 25)
	MW 3:30pm - 4:45pm	ONLINE

TDPS440 **Arts Leadership Seminar**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Cross-listed with: ARHU440. Credit only granted for: TDPS4440 or ARHU440.

An advanced seminar in arts leadership exposing students to the foundations of arts leadership in not-for-profit organizations as it intersects with current trends in technology, demographics, government policy, and the economy. In case studies based on examples drawn from local arts organizations, students will learn about audience engagement as well as institutional development terminology and best practices.

0101	Leayne Dempsey M 1:00pm - 3:30pm	Seats (Total: 15) ONLINE

TDPS458B **Special Topics in Advanced Performing Arts; Exploring and Creating Virtual Performance**

Credits: 2-3 Grading Method: Regular, Pass-Fail, Audit

Designed for performing arts students. Offers instruction at an advanced level in various aspects of performance such as Voice for the Performing Arts, Movement for the Performing Arts, Acting for the Performing Arts, Partner Dance and a myriad of specific aspects within these genres.

0101	Samuel Crawford, Marielis Garcia Class time/details on ELMs	Seats (Total: 10) ONLINE

TDPS458O **Special Topics in Advanced Performing Arts; Voice, Text, Dance Making**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Designed for performing arts students. Offers instruction at an advanced level in various aspects of performance such as Voice for the Performing Arts, Movement for the Performing Arts, Acting for the Performing Arts, Partner Dance and a myriad of specific aspects within these genres.

Students must pay a $25 lab fee. Open to all UMD students.

5501	Alvin Mayes Tu 3:30pm - 4:45pm Th 3:30pm - 4:45pm	Seats (Total: 15) ONLINE PAC 1610

TDPS469 **Advanced Practicum in Stage Management**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

A graded course in stage management for theatre and/or dance productions. A hands-on laboratory experience.

0101	Jennifer Schwartz Contact instructor or department for details.	Seats (Total: 8)

TDPS479 **Production Practicum**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

A graded course in a specified practical aspect of mounting a theatre or dance production. It is a hands-on, purely laboratory experience.

1001	Bobby Hunter Contact instructor or department for details.	Seats (Total: 25)
1002	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)
1003	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)
1004	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)
1005	Andrew Cissna Contact instructor or department for details.	Seats (Total: 60)
1006	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)
1007	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)
2001	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)
2002	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)
2003	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)
2004	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)
2005	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)

2006	Bobby Hunter Contact instructor or department for details.	Seats (Total: 15)

THET Theatre Fall 2020

THET110 **Introduction to the Theatre**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU

In the age of pop music and blockbuster films, of memes and viral videos, we often forget that theatre was one of the original forms of popular entertainment. We will focus on theatre practitioners including actors, directors, designers and backstage personnel to understand how theatre is produced. We will also consider popular entertainment in Europe and America, with a particular focus on musical theatre and Broadway to explore how theatre communicates, resonates, and remains relevant to all audiences.

0101	Fraser Stevens, Alexander Miller MWF 11:00am - 11:50am	Seats (Total: 120) ONLINE
0201	Alexander Miller, Fraser Stevens MWF 12:00pm - 12:50pm	Seats (Total: 120) ONLINE
FC01	Robert Jansen TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 22) ONLINE

THET116 **Fundamentals of Theatrical Design**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Examines theatre as an environmental art that is realized through collaboration between set, costume, and lighting designers.

Students must pay a $25.00 lab fee.

5501	Michael Winston, Channing Tucker, Jacob Hughes Th 3:00pm - 4:50pm Tu 3:00pm - 4:50pm	Seats (Total: 20) PAC 2733 ONLINE

THET120 **Introduction to Acting**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must not be in Theatre program.

Through scene study, exercises, and improvisation, an appreciation is developed for the working habits of actors, which will aid them in rehearsal as well as performance.

Students must pay a $25.00 lab fee.

5501	Leslie Felbain TuTh 10:00am - 11:50am	Seats (Total: 14) ONLINE	

THET222 **Foundations of Acting and Performance**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Students will become familiar with the tools and process of acting through the discipline of acting exercises, analyzing character and performing. Students will research various theatre artists that have contributed to the acting process. Through monologue and scene work students will learn listening skills, communicative, collaborative and embodiment skills and will learn how to use the self in the imaginative process and research. And, most importantly, students will learn creative process through practice.

Students must pay a $25.00 lab fee.

5501	Jennifer Newsham TuTh 2:00pm - 3:50pm	Seats (Total: 14) ONLINE	Lab
5502	Scot Reese Tu 10:00am - 11:50am Th 10:00am - 11:50am	Seats (Total: 14) PAC 3736 ONLINE	 Lab Lab

THET223 **Text and Context in Western Theatre**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Introduction to the analysis and critique of the play script. Students will have the opportunity to read, analyze, and interpret western dramatic literature from a range of periods and styles. Texts are analyzed from a variety of theatrical analytical perspectives, with an eye towards choices theatre artists must make in the creation of a theatrical production.

0101	Christen Mandracchia MW 11:30am - 12:45pm	Seats (Total: 20) ONLINE
0102	Jared Strange MW 10:00am - 11:15am	Seats (Total: 20) ONLINE

THET269B **Special Topics in Study Abroad II; The Meaning of Style**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

THET269T **Special Topics in Study Abroad II; 20th Century and Contemporary Spanish Theatre**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

THET274 **Introduction to Stage Management**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET114 or TDPS201; and permission of ARHU-School of Theatre, Dance & Performance Studies department.

Familiarization with the techniques and skills required of a Stage Manager in a theatrical production, including organization, production meetings, rehearsals, tech and running a show. The outcome at the conclusion of the course is the ability to function as an Assistant Stage Manager in a supervised situation.

Students must pay a $25.00 lab fee.

5501	Jennifer Schwartz TuTh 11:00am - 12:15pm	Seats (Total: 12) ONLINE

THET284 **Stage Costume Construction I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Study and practical experience in garment construction and related costume crafts as used in theatre costume design. Flat pattern development, corset construction, theatrical sewing techniques and organization of the costume construction process.

Students must pay a $25.00 lab fee.

5501	Susan Chiang	Seats (Total: 12)	
	M 9:00am - 10:50am W 9:00am - 10:50am	PAC 3749 ONLINE	Lab Lab

THET285 **The Art of Communication and Presentation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSOC

Credit only granted for: COMM107, COMM200, INAG110, JOUR130, or THET285.

An introduction to the fundamental practice and theory of public speaking and oral communication using theatrical techniques of both performance and the craft of storytelling.

0101	Leslie Felbain MW 10:00am - 11:50am	Seats (Total: 25) ONLINE
0102	Tara Demmy TuTh 12:00pm - 1:50pm	Seats (Total: 25) ONLINE
0103	Jenna Gerdsen MW 12:00pm - 1:50pm	Seats (Total: 25) ONLINE
FC02	Jennifer Ring MW 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 25) ONLINE
FC04	Drew Barker TuTh 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 25) ONLINE
FC06	Jennifer Ring MW 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 25) ONLINE

THET286 **Experiential Learning I**

(Perm req) Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET222, THET223, and THET116. And THET114; or TDPS201. And permission of ARHU-School of Theatre, Dance & Performance Studies department.

Introductory internship in theatre. Constructed to help students in their sophomore year gain practical experience in a supportive work environment in the theatre. Student must research and propose internship to a Faculty Advisor and Internship Venue.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0210	Franklin Hildy Contact instructor or department for details.	Seats (Total: 5)
0301	Leigh Smiley Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)
0401	Scot Reese Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0601	Instructor: TBA Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)
0901	Instructor: TBA Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)
1301	Brian MacDevitt Contact instructor or department for details.	Seats (Total: 5)
1501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1601	Daniel Conway Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)

1701	Helen Huang Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)
1801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2001	Instructor: TBA Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)
2003	Instructor: TBA Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)
2005	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2007	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

THET293 **Black Theatre and Performance I**

Credits: 3 | Grading Method: Regular, Pass-Fail | CORE: HA, D | General Education: DSHU, DSSP, DVUP

Thematic and historical survey of African-American drama from the late nineteenth century to the 1960s. Emphasis on sociopolitical context, thematic thrust, issues, styles, the aesthetic reflected in the work, impact on African-American and general theatre audiences.

0101	Gianina Lockley TuTh 12:30pm - 1:45pm	Seats (Total: 20) ONLINE

THET310 **Voice for the Actor I**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET116, THET222, THET223, and TDPS201; and must Interview; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Sophomore standing or higher.

Freeing the natural voice. In-depth experience of connection of actor's voice to thought, impulse and emotion. Tools for releasing tension, increasing resonance and range, and refining articulation will be explored.

Students must pay a $25.00 lab fee.

5501	Lisa Nathans MW 10:00am - 11:50am	Seats (Total: 15) ONLINE	Lab

THET325 **Actor's Process I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in THET310; or permission of Instructor. And must audition; and permission of ARHU-School of Theatre, Dance & Performance Studies department.

Focus on use of self in creating character. Tools employed include decision-making and use of imagery, personalization, objectives, adjectives, and verbs.

Students must pay a $25.00 lab fee.

5501	Leigh Smiley TuTh 10:00am - 11:50am	Seats (Total: 12) ONLINE
5502	Leigh Smiley TuTh 2:00pm - 3:50pm	Seats (Total: 12) ONLINE

THET328W **Special Topics in Intermediate Theatre and Performance; Theatre and Performance in Iran**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics covered include: Intercultural Theatre, Performance Art, Puppetry, Solo Performance, or Theatrical Design.

Cross-listed with PERS398A. Credit granted for PERS398A or THET328W. Multimedia survey of Iranian theatre and performance traditions from ancient Persia to contemporary Iran. Old performances (oral storytelling, shadow/puppet shows, comic and passion plays) and Western-style theatre and their mutual influence will be examined. Practical information abouthow to write about plays in their contexts, close readings, class discussions, watching performances, role-playing, and creative responseshelp develop analytical and critical skills. The ultimate aim is to examine Iranian theatre s potential in reflecting and changing theway Iranians think, ask questions, and play. Taught in English.

0101	Marjan Moosavi TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE

THET330 **Play Directing I**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET222, THET223, and THET116. And THET114; or TDPS201. And permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Junior standing or higher.

A lecture-laboratory course dealing with the techniques of coordinating, designing and guiding the production of a script through to performance. Study and practice in stage composition, movement, pacing, script and character analysis, and rehearsal routines. Emphasis on methods of communicating a script to an audience.

5501	Scot Reese	Seats (Total: 12)	
	M 10:00am - 11:50am	PAC 3736	Lab
	W 10:00am - 11:50am	ONLINE	Lab

THET340 **Playwriting I**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET222, THET223, THET116, and TDPS201. Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department. Credit only granted for: THET340 or THET399P. Formerly: THET399P.

Will introduce students to the art of playwriting through exploratory writing exercises, the reading of successful plays, the development of new short scripts, how to make theatrical choices, and how to use the six elements of storytelling.

Students must pay a $25.00 lab fee.

5501	Jennifer Newsham	Seats (Total: 12)
	MW 1:00pm - 2:50pm	ONLINE

THET351 **Musical Theatre I**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: THET351 or THET328M. Formerly: THET328M.

An introduction for students interested in developing their skills with musical theatre, specifically the work of the actor interpreting songs and text in musicals. With a primary focus on American Musical Theatre repertoire, students will prepare and present various solo, duet, and group numbers.

5501	Monique Midgette	Seats (Total: 12)
	Tu 9:00am - 11:50am	ONLINE

THET369L **Special Topics in Study Abroad III; 20th Century and Contemporary Latin American Theatre**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

THET380 **Sound Design**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET116. And THET114; or TDPS201; or permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Sophomore standing or higher.

Theatre Sound Design is a first course in designing sound for stage productions.

Students must pa a $25 lab fee.

5501	Samuel Crawford TuTh 10:00am - 11:50am	Seats (Total: 15) ONLINE

THET386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-School of Theatre, Dance & Performance Studies department.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0201	Franklin Hildy Contact instructor or department for details.	Seats (Total: 5)
0301	Leigh Smiley Contact instructor or department for details.	Seats (Total: 5)
0401	Scot Reese Contact instructor or department for details.	Seats (Total: 5)
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

0601	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0801	Leslie Felbain Contact instructor or department for details.	Seats (Total: 5)
0901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1101	Mikhail Kachman Contact instructor or department for details.	Seats (Total: 5)
1301	Brian MacDevitt Contact instructor or department for details.	Seats (Total: 5)
1501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1601	Daniel Conway Contact instructor or department for details.	Seats (Total: 5)
1701	Helen Huang Contact instructor or department for details.	Seats (Total: 5)
1801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2001	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2003	Jennifer Schwartz Contact instructor or department for details.	Seats (Total: 5)
2005	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2007	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2009	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

THET390 History of Theatre I

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Prerequisite: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

The history of Western theatre from its origins in classical antiquity through the mid-seventeenth century with emphasis on plays and playwrights, architecture and decor, acting and costuming, and significant personalities. Includes explorations of interrelationships between Western theatre and the theatre of other cultures.

0101	Jordan Ealey, Lindsey Barr MW 11:30am - 12:45pm	Seats (Total: 25) ONLINE
0102	Lindsey Barr, Jordan Ealey MW 10:00am - 11:15am	Seats (Total: 20) ONLINE

THET399 Independent Study

(Perm req) Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

0201	Franklin Hildy Contact instructor or department for details.	Seats (Total: 5)
0301	Leigh Smiley Contact instructor or department for details.	Seats (Total: 5)
0401	Scot Reese Contact instructor or department for details.	Seats (Total: 5)
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0601	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0701	Jennifer Newsham Contact instructor or department for details.	Seats (Total: 5)
0801	Leslie Felbain Contact instructor or department for details.	Seats (Total: 5)

0901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1101	Mikhail Kachman Contact instructor or department for details.	Seats (Total: 5)
1301	Brian MacDevitt Contact instructor or department for details.	Seats (Total: 5)
1401	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1501	Lisa Nathans Contact instructor or department for details.	Seats (Total: 5)
1601	Daniel Conway Contact instructor or department for details.	Seats (Total: 5)
1701	Helen Huang Contact instructor or department for details.	Seats (Total: 5)
1801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2001	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2003	Jennifer Schwartz Contact instructor or department for details.	Seats (Total: 5)
2005	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2007	Jared Mezzocchi Contact instructor or department for details.	Seats (Total: 5)
2009	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

THET399H **Independent Study; London Stage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET399W **Independent Study; The London Stage**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET399X **Independent Study; The London Stage**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET408X **Seminar: Theory and Performance Studies; Performing Latin(x) America**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Studies in theatre theory and performance studies from classical antiquity to the present.

0101	Jonelle Walker	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	ONLINE

THET408Z **Seminar: Theory and Performance Studies; Feminism Remixed: Gender and Performance in Popular Culture**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Studies in theatre theory and performance studies from classical antiquity to the present.

0101	Leticia Ridley	Seats (Total: 15)
	TuTh 1:30pm - 2:45pm	ONLINE

THET411 **Voice for the Actor II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET324 or THET325; and must audition; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Junior standing or higher. Credit only granted for: THET311, THET411, or THET499L. Formerly: THET311.

Learn the International Phonetic Alphabet (IPA) and apply to exploration of sound and language. Designed to increase voice and speech awareness, and create a base knowledge from which to approach any accent or dialect.

Students must pay a $25 lab fee.

5501	Lisa Nathans	Seats (Total: 12)
	MW 1:00pm - 2:50pm	ONLINE

THET428L **Special Topics in Advanced Theatre and Performance; Advanced Techniques Lighting Design: Programming**

(Perm req)

Credits: 3 Grading Method: Regular

This course is offered as part of the School of Theatre, Dance, and Performance Studies' Artist in Residence program. Topics covered may include: Intercultural Theatre; Performance Art; Puppetry; Solo Performance; or Theatrical Design.

Required pre-requisite THET377. Students must pay a $25 lab fee.

5501	Mitchell Cronin	Seats (Total: 8)
	TuTh 3:00pm - 4:50pm	PAC 3731

THET428V **Special Topics in Advanced Theatre and Performance; Digital and Interactive Art Practice**

Credits: 3 Grading Method: Regular, Pass-Fail

This course is offered as part of the School of Theatre, Dance, and Performance Studies' Artist in Residence program. Topics covered may include: Intercultural Theatre; Performance Art; Puppetry; Solo Performance; or Theatrical Design.

0101	Marielis Garcia	Seats (Total: 6)
	TuTh 9:30am - 10:45am	ONLINE

THET429 **Actor's Studio**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail

Participation in dramatic roles executed under faculty supervision in the department's productions. Eligible students must make commitments and plan performances with course instructor during pre-registration.

Contact department for information to register for this course.

THET465 **History of Fashion for the Theatre**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET116; or permission of instructor. Restriction: Sophomore standing or higher.

A survey of Western clothing from the Ancient Worlds through 20th Century. A discussion of the cultural contexts of various trends in fashion through an examination of art, industry and textiles.

5501	Mikhail Kachman W 3:00pm - 5:50pm	Seats (Total: 10) ONLINE

THET471 **Design Studio in Scenery**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET371; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Jointly offered with THET639. Credit only granted for: THET471 or THET639.

Advanced study of scenic design for the theatre. Particular design projects will vary.

0101	Daniel Conway M 9:00am - 10:50am W 9:00am - 10:50am	Seats (Total: 3) PAC 2733 PAC 2733

THET473 **Rendering for the Theatre II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET373; or permission of instructor.

Continued study in rendering techniques and graphic skills for theatrical design presentation. Emphasis on style, technique and use of different artistic media.

Students must pay a $25 lab fee.

5501	Helen Huang	Seats (Total: 8)	
	Tu 3:30pm - 5:20pm Th 3:30pm - 5:20pm	PAC 2733 ONLINE	

THET477 **Design Studio in Lighting**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET377; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Jointly offered with THET659. Credit only granted for: THET477 or THET659.

Designed for students who have successfully completed THET377 and wish to further develop their lighting design skills. Emphasis is on theoretical design of productions and realized light lab projects. Particular design projects will vary.

Students must pay a $25.00 lab fee.

5501	Andrew Cissna	Seats (Total: 3)	
	M 1:00pm - 2:50pm W 1:00pm - 2:50pm	ONLINE PAC 3731	Lab Lab

THET499 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Contact department for information to register for this course.

THET499B **Independent Study; Figure Drawing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Students must pay a $25 lab fee

5501	Susan O'Neill	Seats (Total: 10)
	F 9:00am - 11:50am	ONLINE

THET600 **Introduction to Graduate Research Methods**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be a graduate student in a Theatre program. Also offered as: THET700. Credit only granted for: THET600 or THET700. Additional information: Only students in the doctoral program may register for THET700.

Basic skills in theatre research.

0101	Franklin Hildy	Seats (Total: 12)
	MW 4:00pm - 5:15pm	ONLINE

THET606 **Teaching Theatre**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Strategies and materials for teaching a typical introductory course in theatre, with emphasis on specific problems of classroom instruction (e.g., creating a supportive climate, promoting active learning by students, constructing appropriate tests, adapting methods to content, and resolving discipline problems).

0101	Crystal Davis	Seats (Total: 10)
	Tu 2:00pm - 3:15pm	ONLINE

THET608C **Seminar: Theory and Performance Studies; The Politics and Pleasure of Love on Stage and Screen**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

A repeatable seminar on special topics in theory of the Theatre and Performance Studies.

0101	Melissa Blanco Borelli	Seats (Total: 10)
	Th 3:30pm - 6:00pm	ONLINE

THET639A **Advanced Design Studio in Scenery; First Year Design**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

0101	Daniel Conway	Seats (Total: 8)	
	M 9:00am - 10:50am	PAC 2733	
	W 9:00am - 10:50am	PAC 2733	

THET639D **Advanced Design Studio in Scenery; Advanced 2nd and 3rd Year Design**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

0101	Daniel Conway	Seats (Total: 8)	
	TuTh 9:00am - 10:50am	PAC 2733	
	Class time/details on ELMs	ONLINE	

THET649A **Advanced Design Studio in Costume; First Year Design**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

A series of carefully and individually structured assignments and projects that allows students to progress in their design training.

0101	Helen Huang	Seats (Total: 6)	
	Th 11:00am - 12:50pm	PAC 2755	Lab
	Tu 11:00am - 12:50pm	ONLINE	Lab

THET659A **Advanced Design Studio in Lighting; First Year Design**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

Lighting Desing for Scenic, Costume, Projection, and Dance MFAs.

0102	Andrew Cissna	Seats (Total: 6)	
	M 1:00pm - 2:50pm	ONLINE	Lab
	W 1:00pm - 2:50pm	PAC 3731	Lab

THET659D **Advanced Design Studio in Lighting; Advanced 2nd and 3rd Year Design**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

0101	Andrew Cissna	Seats (Total: 6)	
	M 3:00pm - 6:00pm	PAC 3731	Lab

THET669 **Independent Study**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Contact department for information to register for this course.

THET669A **Independent Study; History of Fashion for Theatre**

Credits: 3

Grading Method: Regular, Audit, Sat-Fail

5501	Mikhail Kachman	Seats (Total: 10)
	W 3:00pm - 5:50pm	ONLINE

THET669B **Independent Study; Exploring and Creating Virtual Performance**

Credits: 2-3

Grading Method: Regular, Audit, Sat-Fail

0101	Marielis Garcia, Samuel Crawford	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

THET669C **Independent Study; Design Collaboration**

Credits: 1

Grading Method: Regular, Audit, Sat-Fail

0101	Mikhail Kachman	Seats (Total: 5)
	Contact instructor or department for details.	

THET669F **Independent Study; Figure Drawing**

Credits: 3

Grading Method: Regular, Audit

5501	Susan O'Neill	Seats (Total: 10)	
	F 9:00am - 11:50am	ONLINE	

THET669W **Independent Study; Devised Work Collaboration**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Students must pay a $25 course fee. The class will explore new techniques of telling mythological themes, specifically examining the use of high style-low technical approaches to theatrical storytelling. Students will discuss and explore different avenues of storytelling through design and performance, including scenery, costumes, lighting, projections, puppetry, movement, and performance. Focus will be on the cross-discipline exploration and discussion of design techniques as vehicles for storytelling while helping students examine and push their own style and tools of design. The final project will be a performance piece by the designers in the light lab loosely based off an existing text.

5501	Brian MacDevitt	Seats (Total: 8)	
	W 9:00am - 11:50am	PAC 2740	Lab
	M 9:00am - 11:50am	ONLINE	Lab

THET669X **Independent Study; Digital and Interactive Art Practice**

Credits: 2-3 Grading Method: Regular, Audit, Sat-Fail

0101	Marielis Garcia	Seats (Total: 6)
	TuTh 9:30am - 10:45am	ONLINE

THET700 **Introduction to Graduate Research Methods**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be a graduate student in a Theatre program. Also offered as: THET600. Credit only granted for: THET600 or THET700. Additional information: Only students in the doctoral program may register for THET700.

Basic skills in theatre research.

0101	Franklin Hildy	Seats (Total: 12)
	MW 4:00pm - 5:15pm	ONLINE

THET713 **Performance Studies**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: THET700.

Introduces doctoral students to theoretical and methodological issues in performance studies. We will focus on 3 primary areas of research, analyzing representational strategies of adaptations, ethnography, and cultural analysis of theatrical performance.

0101	Melissa Blanco Borelli Tu 3:30pm - 6:00pm	Seats (Total: 12) ONLINE

THET788 **Master's Tutorial**

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

Collaboration with a faculty member on joint creative and artistic projects.

0201	Franklin Hildy Contact instructor or department for details.	Seats (Total: 5)
0301	Leigh Smiley Contact instructor or department for details.	Seats (Total: 5)
0401	Scot Reese Contact instructor or department for details.	Seats (Total: 5)
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0601	James Harding Contact instructor or department for details.	Seats (Total: 5)
0701	Jennifer Newsham Contact instructor or department for details.	Seats (Total: 5)
0801	Leslie Felbain Contact instructor or department for details.	Seats (Total: 5)
0901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1101	Mikhail Kachman Contact instructor or department for details.	Seats (Total: 5)

1301	Brian MacDevitt Contact instructor or department for details.	Seats (Total: 5)
1501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1601	Daniel Conway Contact instructor or department for details.	Seats (Total: 8)
1701	Helen Huang Contact instructor or department for details.	Seats (Total: 5)
1801	Andrew Cissna Contact instructor or department for details.	Seats (Total: 5)
2001	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2005	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2007	Jared Mezzocchi Contact instructor or department for details.	Seats (Total: 10)

THET789 **Master's Practicum**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Participation in creative and artistic activities with professional level theatrical organizations.

0201	Franklin Hildy Contact instructor or department for details.	Seats (Total: 5)
0301	Leigh Smiley Contact instructor or department for details.	Seats (Total: 5)
0401	Scot Reese Contact instructor or department for details.	Seats (Total: 5)
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0601	James Harding Contact instructor or department for details.	Seats (Total: 5)

0701	Jennifer Newsham Contact instructor or department for details.	Seats (Total: 5)
0801	Leslie Felbain Contact instructor or department for details.	Seats (Total: 5)
0901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1101	Mikhail Kachman Contact instructor or department for details.	Seats (Total: 5)
1301	Brian MacDevitt Contact instructor or department for details.	Seats (Total: 5)
1601	Daniel Conway Contact instructor or department for details.	Seats (Total: 5)
1701	Helen Huang Contact instructor or department for details.	Seats (Total: 5)
1801	Andrew Cissna Contact instructor or department for details.	Seats (Total: 5)
2001	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2005	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2007	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

THET799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

THET888 **Doctoral Practicum in Theatre**

(Perm req)

Credits: 1-6 Grading Method: Regular

Critical analysis of a phase of a professional field of theatre. Analysis of professional activity through personal observation. Evaluation of the purpose, process, effectiveness, and efficiency of professional activity. Recommendations for training and further research.

0201	Franklin Hildy Contact instructor or department for details.	Seats (Total: 10)
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
0601	James Harding Contact instructor or department for details.	Seats (Total: 5)
2001	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
2005	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)

THET889 **Doctoral Tutorial in Theatre**

(Perm req)

Credits: 1-6 Grading Method: Regular

Individual research in theatre.

0201	Franklin Hildy WF 2:45pm - 4:00pm	Seats (Total: 10) ONLINE
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
0601	James Harding Contact instructor or department for details.	Seats (Total: 5)
2001	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
2005	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)

THET898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

THET899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

TLPL Teaching and Learning, Policy and Leadership Fall 2020

TLPL101 **Inquiry Approach to Teaching STEM (Step 1)**

Credits: 1 Grading Method: Regular

Additional information: Students must allow for a three-hour window between 7:45 AM and 3:15 PM in their schedule for field experiences in a local school 3-4 times during the semester. A background check is required and will be facilitated by the Terrapin Teacher program coordinator.

Explore STEM teaching and learning and classroom complexity, and develop teaching skills through discussion-based, collaborative class sessions, and experiences in local schools. To explore/understand the fundamentals of inquiry teaching, students will observe, plan and teach student-centered lessons.

0101	Margaret Walton M 3:00pm - 4:20pm	Seats (Total: 24) ONLINE
0201	Jennifer Manly M 3:00pm - 4:20pm	Seats (Total: 24) ONLINE
0301	Steven Karig, Kayla White Th 12:30pm - 1:50pm	Seats (Total: 24) ONLINE
0401	Sarah Henson-Darko Th 12:30pm - 1:50pm	Seats (Total: 24) ONLINE
0501	Elias Gonzalez Th 3:30pm - 4:50pm	Seats (Total: 24) ONLINE

TLPL102 **Inquiry Teaching of STEM in Middle School**

Credits: 2 Grading Method: Regular General Education: DSSP

Prerequisite: Must have completed TLPL101. Additional information: Attendance at each class session will be vital to student success in the course. To complete the observations and lessons, students must allow a three hour block of time during the local middle school operational hours from 7:45 am to 3:15 pm. A background check is required.

Second course in the Terrapin Teachers teacher preparation sequence. Students gain field experience and continue exploring teaching as a career by conducting teacher observations, and planning and implementing lessons in local, high-need middle school classrooms. Students work closely with UM master teachers to build upon the inquiry-based teaching practices developed in TLPL 101. Students work with mathematics and science curricula while attending to state and district standards, in order to develop and enact lessons that are responsive to students' reasoning in math and science.

0101	Anita Sanyal W 3:00pm - 4:50pm	Seats (Total: 24) ONLINE
0201	Anita Sanyal Th 3:30pm - 5:20pm	Seats (Total: 23) ONLINE

TLPL250 **Historical and Philosophical Perspectives on Education**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Credit only granted for: EDPS210 or TLPL250. Formerly: EDPS210.

An examination of illustrative historical and philosophical examples of the interplay of ideas and events in the shaping of educational aims and practices from ancient cultures to modern technological societies.

0101	Campbell Scribner TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE
0201	Marissa Sariol-Clough MW 10:00am - 11:15am	Seats (Total: 30) ONLINE
0301	Lisa Eaker TuTh 11:00am - 12:15pm	Seats (Total: 30) ONLINE
0401	Genevieve D'Cruz MW 1:00pm - 2:15pm	Seats (Total: 30) ONLINE

TLPL251 **Introduction to Teaching**

Credits: 3 Grading Method: Regular

Credit only granted for: EDCI280 or TLPL251. Formerly: EDCI280.

An exploration of teaching in public schools, grades 1-12: student diversity, societal changes, and the expectations of teachers and public schools. Three hour per week field component.

Two-hour seminar each week on campus plus a four-hour lab each week which includes three hours in a local public school classroom and commute time to and from campus. Most schools are within a 20-minute commute with more travel time needed if public transportation is required. Allow for travel time between on-campus coursework and the off-campus public school experience. All schools require a Prince Georges County Public School security process that includes fingerprinting and a background check at an additional cost, prior to the start of the experience.

0101	Lisa Bote Th 4:00pm - 5:50pm Tu 8:00am - 12:00pm	Seats (Total: 8) ONLINE ONLINE	 Lab
0102	Lisa Bote Th 4:00pm - 5:50pm W 8:00am - 12:00pm	Seats (Total: 8) ONLINE ONLINE	 Lab
0103	Lisa Bote Th 4:00pm - 5:50pm Th 8:00am - 12:00pm	Seats (Total: 8) ONLINE ONLINE	 Lab
0104	Lisa Bote Th 4:00pm - 5:50pm Th 11:30am - 3:30pm	Seats (Total: 8) ONLINE ONLINE	 Lab

TLPL288D **Special Problems in Education; Developmental Heuristics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership. Available only to freshmen and sophomore students who have definite plans for individual study of approved problems relative to their preparation for teaching.

0101	Sharon Vanwright Contact instructor or department for details.	Seats (Total: 115)

TLPL288R **Critical Race Counter-storytelling**

Credits: 3 Grading Method: Regular General Education: DSSP, DVCC, SCIS

Prerequisite: none. Corequisite: none. Recommended: none. Restriction: none. Repeatable to 3 credits. Additional information: This is a storytelling writing/composing workshop. Students will engage regularly in small writing groups.

This is a storytelling course where students explore what it means to compose counternarratives through critical race lenses. How might we compose stories that challenge dominant narratives about people and communities who are often subjected to one-sided, deficit portrayals? How do we interrogate the white gaze and the white imagination as represented in popular media, literary works, and academic writing, particularly about communities of color?

0101	Rossina Liu TuTh 2:00pm - 3:15pm	Seats (Total: 60) ONLINE

TLPL288W **Forbidden Books: Censorship of Children's & Young Adult Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

0101	Wayne Slater TuTh 12:30pm - 1:45pm	Seats (Total: 60) ONLINE

TLPL298 **Special Problems in Education**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to students who have definite plans for study of approved problems.

Contact department for information to register for this course.

TLPL305B **Curriculum and Instruction Cluster**

(Perm req)

Credits: 0 Grading Method:

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 30)
0201	Instructor: TBA Contact instructor or department for details.	Seats (Total: 28)
0301	Instructor: TBA Contact instructor or department for details.	Seats (Total: 30)

TLPL305M **Curriculum and Instruction Cluster**

(Perm req)

Credits: 0 Grading Method:

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 20)

TLPL312 **Curriculum and Instruction in Elementary Education: Mathematics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL361. Corequisite: EDCI362, EDCI342, TLPL321, and TLPL362. Restriction: Must be in Elementary Education program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI352 or TLPL312. Formerly: EDCI352.

Materials and procedures to help children sense arithmetical meanings and relationships. Development of an understanding of the number system and arithmetical processes. Includes laboratory/field experiences.

0101	Imani Goffney M 12:00pm - 2:45pm Contact instructor or department for details.	Seats (Total: 0) ONLINE
0201	Tarik Buli Th 8:30am - 11:15am Contact instructor or department for details.	Seats (Total: 0) ONLINE
0301	Imani Goffney Tu 12:00pm - 2:45pm Contact instructor or department for details.	Seats (Total: 0) ONLINE

TLPL321 **Curriculum and Instruction in Elementary Education: Science**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL361. Corequisite: TLPL312, EDCI362, EDCI342, and TLPL362. Restriction: Must be in Elementary Education program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI372 or TLPL321. Formerly: EDCI372.

Objectives, methods, materials and activities for teaching science in the elementary school; emphasis on teaching strategies which help children learn the processes and concepts of science. Includes laboratory/field experiences.

0101	Daniel Levin	Seats (Total: 0)	
	M 8:30am - 11:15am	ONLINE	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0201	Amy Green	Seats (Total: 0)	
	Th 12:00pm - 2:45pm	ONLINE	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab
0301	Amy Green	Seats (Total: 0)	
	Tu 8:30am - 11:15am	ONLINE	
	Class time/details on ELMs	ONLINE	
	Class time/details on ELMs	ONLINE	Lab

TLPL340 **Introduction to Children's Literature and Critical Literacy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Elementary Education program; or must be a Pre-Education Major. Credit only granted for: EDCI443 or TLPL340. Formerly: EDCI443.

Analysis of literary materials for children and youth. Timeless and ageless books, and outstanding examples of contemporary publishing. Evaluation of the contributions of individual authors, illustrators and children's book awards.

0101	Margaret Peterson	Seats (Total: 22)
	MW 1:00pm - 2:15pm	ONLINE

TLPL360 **Foundations of Education**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

Credit only granted for: EDPS301 or TLPL360. Formerly: EDPS301.

Social context of education and conflicts over philosophies, values, an goals that are reflected in educational institutions in our pluralistic society. Helps teachers become reflective, critical thinkers about the social and philosophical issues they face and the choices they make.

0101	Neil Dhingra	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

0201	Charlotte Healy MW 11:00am - 12:15pm	Seats (Total: 30) ONLINE
0301	Doug McNamara TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE
0401	Jason Saltmarsh MW 2:00pm - 3:15pm	Seats (Total: 30) ONLINE

TLPL401 **Student-Centered Curriculum and Instruction**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP, DVCC

Prerequisite: Permission of instructor; and TLPL102; and must have completed or be concurrently enrolled in TLPL488M. Credit only granted for: TLPL488P or TLPL401. Formerly: TLPL488P. Additional information: Field experience for this course will require students to be available for a 2-4 hour block of time at various points throughout the semester to complete observations and teach lessons between 8:00 a.m. and 3:30 p.m. A background check is required and will be facilitated through the Terrapin Teacher program coordinator.

A focus on using student-centered teaching and learning approaches in high school STEM classrooms. Students will develop and implement a multi-day series of lessons, building upon the foundations of inquiry-based practices developed in prior courses. Students will also consider the implications of cultural awareness on teaching practices broadly, as well as in the specific contexts of their fieldwork.

0101	Sarah Henson-Darko TuTh 2:00pm - 3:20pm	Seats (Total: 24) ONLINE
0201	Dana Grosser-Clarkson TuTh 2:00pm - 3:20pm	Seats (Total: 24) ONLINE

TLPL403 **Teaching and Learning High School Mathematics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have 2 semesters of calculus; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Corequisite: EDCI355. Restriction: Must be in Secondary Educ: Mathematics program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI455 or TLPL403. Formerly: EDCI455.

Methods of teaching and assessing the high school mathematics curriculum; aligning tasks and activities to curriculum standards; lesson planning; and selection and use of technology. The course also focuses on managing large group dynamics in the high school mathematics classroom.

0101	Dana Grosser-Clarkson	Seats (Total: 24)
	M 5:00pm - 8:00pm	ONLINE

TLPL413 **Teaching and Learning Middle School Mathematics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI457 or TLPL413. Formerly: EDCI457.

Methods of teaching and assessing the middle school mathematics curriculum. Understanding the conceptual difficulties students have in moving from whole numbers to rational numbers, additive thinking to multiplicative thinking, and arithmetic to algebra. Lesson planning and selection of technology and other materials are applied in the context of supervised tutoring of students having difficulty in middle school mathematics. Lab and field experience required. Supervised tutoring takes place on site at a local middle school therefore TLPL413 students will be expected to travel to a local middle school for 8-10 of the class meetings.

0101	Monica Anthony	Seats (Total: 25)
	TuTh 3:10pm - 5:00pm	TWS 0320

TLPL414 **Knowing and Learning in Mathematics and Science**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSHS

Prerequisite: Must have completed or be concurrently enrolled in TLPL102. Credit only granted for: TLPL488M or TLPL414. Formerly: TLPL488M.

Special and intensive treatment of current topics and issues in mathematics and science teaching and learning, policy and leadership. The overall goal of the course is to orient future teachers to the discourses and theories that shape what we know about how students learn math and science.

0101	Lawrence Clark	Seats (Total: 24)
	W 4:00pm - 6:50pm	ONLINE

TLPL420 **Knowledge, Reasoning, and Learning in Science**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: TLPL420 or EDCI411. Formerly: EDCI411.

For prospective science teachers. Investigations of the nature of knowledge, reasoning, and learning in middle and secondary science. Readings from cognitive science and science education research; studies of student thinking in interview and classroom observations; analyses of curricula. Includes laboratory and field experiences.

0101	Madiha Moin	Seats (Total: 0)
	TuTh 3:30pm - 4:45pm	ONLINE

TLPL423 **Interdisciplinary Teaching in the Middle Grades I**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL413 and TLPL420; or permission of instructor. Corequisite: EDCI360 and TLPL475. Restriction: Minimum cumulative GPA of 2.75; and must be in the Middle School Teacher Education Program, major code 0804P. Credit only granted for: EDCI413 or TLPL423. Formerly: EDCI413.

For prospective middle school teachers. Studying and planning interdisciplinary instructional practices in middle school. Utilizes context and experiences from students' field placements. Use of technology and incorporation of technology into instruction.

0101	Janet Walkoe	Seats (Total: 0)
	Th 10:00am - 11:50am	ONLINE

TLPL425 **Learning and Teaching in Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL420; or permission of instructor. Restriction: Must be in Secondary Educ: Science program. Credit only granted for: EDCI470 or TLPL425. Formerly: EDCI470.

Studies of student learning and instructional practices in science teaching.

0101	Jennifer Mesiner	Seats (Total: 24)
	M 5:00pm - 8:00pm	ONLINE

TLPL433 **Foundations of Art Education**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Minimum cumulative GPA of 2.75. Credit only granted for: EDCI403 or TLPL433. Formerly: EDCI403.

Introduction to the field of Art Education and the role of the visual arts in grades PreK-12 for today's diverse school populations. The fundamental, historical and philosophic components of art education with an emphasis on arts disciplines and curriculum. Includes a school-based practicum. For those considering art education as a major.

0101	Katherine Coogan	Seats (Total: 19)
	Th 9:00am - 12:00pm	ONLINE

TLPL436 **Studio Processes and Materials: 2D**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT210. Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department; and junior standing or higher; and must not be in any of the following programs (Early Childhood Education; Elementary Education; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Physical Education; Music Education; Special Education). Credit only granted for: EDCI406 or TLPL436. Formerly: EDCI406.

A discussion/studio format used to develop skills, materials, resources and education strategies for using technology and two-dimensional art in K-12 programs.

0101	Margaret Walker	Seats (Total: 10)
	Th 12:30pm - 4:05pm	TWS 0234

TLPL440 **Issues in the Education of English Language Learners**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: EDCI432 or TLPL440. Formerly: EDCI432.

Introduction to and analysis of current and historical research, practice, trends, and public policy issues in education as they relate to English language learners in K-12 and other settings.

0101	Wyatt Hall	Seats (Total: 22)
	TuTh 9:30am - 10:45am	ONLINE

TLPL442 **Foundations of Literacy and Biliteracy Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: EDCI435 or TLPL442. Formerly: EDCI435.

An overview of the research on literacy and biliteracy development for English learners. Specifically, the course explores the theoretical models and processes of teaching reading and writing, current literacy/biliteracy issues, assessment, and strategies for developing literacy and biliteracy skills for English learners.

0101	Melinda Martin-Beltran	Seats (Total: 22)
	MW 11:00am - 12:15pm	ONLINE

TLPL443 **Understanding Cross-Cultural Communication for Teaching English Language Learners**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Credit only granted for: EDCI436 or TLPL443. Formerly: EDCI436.

Theories of intercultural communication and techniques for applying them in the teaching of English as a second language (ESL) and content classes. Research and evaluation of selected aspects of a culture as basis for creating, selecting and using culturally-responsive teaching materials and methods.

0101	Amanda Cataneo	Seats (Total: 25)
	M 1:15pm - 4:00pm	ONLINE

TLPL445 **Methods I: K-12 World Language Methods and Technology**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI410, TLPL445, EDCI688K, or TLPL695. Formerly: EDCI410.

The first of two sequential courses required for achieving competence i teaching a foreign language. The sequel to this course is EDCI433 (Methods II) entitled: Advanced K-12 Foreign Language Methods and Technology. EDCI410 requires on-going examination of theories relevant to language acquisition. Students will also investigate the instructional methods that reflect those theories. Lab and field experiences required.

0101	Margaret Marcus	Seats (Total: 15)
	MW 2:00pm - 3:15pm	SQH 1120

TLPL446 **Language Variation and Multilingualism in Elementary Classrooms**

Credits: 3 Grading Method: Regular

Restriction: Must be in Elementary Education program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department.

Issues in language variation and multilingualism in elementary classrooms, schools and communities with a focus on classroom practice, assessment, and policy.

0101	Semi Yeom Tu 8:30am - 11:15am	Seats (Total: 0) ONLINE
0201	Xiaoli Gong W 12:00pm - 2:45pm	Seats (Total: 0) ONLINE
0301	Kellie Rolstad M 12:00pm - 2:45pm	Seats (Total: 0) ONLINE

TLPL447 **Art Education Methods II**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: TLPL435; or students who have taken courses with comparable content may contact the department. Corequisite: TLPL430. Restriction: Minimum cumulative GPA of 2.75; and must be in Secondary Educ: Art program. Credit only granted for: EDCI423, EDCI603, TLPL447 or TLPL633. Formerly: EDCI423.

Methods II builds upon the pedagogical foundation of Methods I and provides future art teachers with the means for developing pre K-12 art lessons and unit plans for a balanced qualitative art program for today's diverse and inclusive schools and classrooms.

0101	Margaret Walker Tu 9:00am - 12:00pm	Seats (Total: 3) TWS 0214

TLPL450 **Advanced K-12 World Language Methods and Technology**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL445. Corequisite: EDCI438. Restriction: Must be in Secondary Educ: Foreign Languages program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI433, EDCI688A, TLPL450 or TLPL696. Formerly: EDCI433.

Teaches advanced best practices for effective foreign language instruction. Topics include: using authentic assessment and materials, applying national standards, teaching writing and culture, motivating students, providing strategy instruction, infusing technology, preparing for K-12 employment, and creating a professional portfolio.

EDCI438 must be taken concurrently with EDCI433.

0101	Margaret Marcus M 5:00pm - 7:45pm	Seats (Total: 10) LEF 2205

TLPL451 **Teaching and Learning in Secondary Education: English**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Credit only granted for: EDCI416 or TLPL451. Formerly: EDCI416.

An introduction for prospective middle and secondary English teachers into the basic issues, concepts, orientations, and processes that shape the teaching of English for diverse students in schools. Candidates explore their own perspectives in relation to local and national trends and develop basic teaching understanding and skills through on-campus seminars, teaching laboratory experiences, and guided field experiences. Students should reserve one full day or two half days per week for field experience.

0101	Peggy Wilson M 8:30am - 10:15am W 8:30am - 10:15am	Seats (Total: 25) ONLINE ONLINE	 Lab
0102	Peggy Wilson M 8:30am - 10:15am W 8:30am - 10:15am	Seats (Total: 10) ONLINE ONLINE	 Lab

TLPL456 **Teaching Writing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: EDCI447. Restriction: Must be in Secondary Educ: English Language Arts program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI467 or TLPL456. Formerly: EDCI467.

Examines current theory, research, best practice, curricula and materials for teaching written communication in grades K-12. Focuses on analytical, argumentative, informative/explanatory, literary analysis, narrative, descriptive, and research writing. Emphasizes instructional planning, assessment, writer problem-solving strategies, information search, development, organization and style appropriate to task, purpose and audience for both non-digital and digital text. English Language Learner and special needs pupil issues considered.

0101	Wayne Slater Th 5:00pm - 7:45pm	Seats (Total: 30) ONLINE

TLPL457 **Literature for Adolescents**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI466 or TLPL457. Formerly: EDCI466.

Reading and analysis of fiction and nonfiction; methods for critically assessing quality and appeal; current theory and methods of instruction; research on response to literature; curriculum design and selection of books.

0101	Margaret Peterson M 5:00pm - 7:45pm	Seats (Total: 30) ONLINE

TLPL460 **Materials and Instruction for Creating Skilled and Motivated Readers, Part I**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Elementary Education program; and junior standing or higher. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI461 or TLPL460. Formerly: EDCI461.

Selecting, evaluating, and using a variety of materials and instructional strategies to create skilled and motivated readers in the elementary grades; Topics include emergent literacy, vocabulary development, reading comprehension and oral reading fluency in diverse classroom settings.

Contact department for information to register for this course.

TLPL461 **Materials and Instruction for Creating Skilled and Motivated Readers, Part II**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL361 and TLPL460. Corequisite: TLPL312, EDCI342, TLPL321, and TLPL362. Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department; and must be in Elementary Education program. Credit only granted for: EDCI462 or TLPL461. Formerly: EDCI462.

Selecting, evaluating, and using a variety of materials to create skilled and motivated readers in the elementary grades, particularly in diverse classroom settings; Topics include word analysis, spelling, writing, reading comprehension strategies, directed reading lessons, and explicit instruction.

Contact department for information to register for this course.

TLPL462 **Reading in the Secondary School**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Restriction: Minimum cumulative GPA of 2.75; and must be in one of the following programs (Middle School Education; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Secondary Educ: Art) ; and permission of department required for post-baccalaureate students. Credit only granted for: EDCI463 or TLPL462. Formerly: EDCI463.

Provides secondary school teachers with understanding the need for and approaches to teaching students to read and learn from content area texts.

0101	Olivia Saracho	Seats (Total: 22)
	W 3:30pm - 6:00pm	ONLINE

TLPL470 **Knowledge, Reasoning, and Learning in Secondary Social Studies**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department; and minimum cumulative GPA of 2.75. Credit only granted for: EDCI426 or TLPL470. Formerly: EDCI426.

An exploration of the nature of knowledge and reasoning in social studies disciplines as well as how students learn social studies. Assessment and investigation of students' conceptions and misconceptions as well as their disciplinary thinking. Implications for teaching and initial lesson design are explored through on-campus seminars as well as guided field experiences. Students should reserve a regular half-day per week for the field experience in local schools. This course is required for admission to the secondary social studies double major.

0101	Lisa Eaker	Seats (Total: 30)
	Th 4:15pm - 7:00pm	ONLINE

TLPL471 **Curriculum, Teaching, and Assessment in Secondary Social Studies**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: TLPL470. Corequisite: EDCI428. Restriction: Must be in Secondary Educ: Social Studies program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Center for Learning & Educational Technology. Credit only granted for: EDCI427 or TLPL471. Formerly: EDCI427.

An exploration of curriculum development, teaching, and assessment in secondary history/social studies. Focus on identifying students' conceptions of social studies topics and designing lessons that advance students' disciplinary thinking and understanding.

0101	Alison Jovanovic	Seats (Total: 15)
	M 4:30pm - 7:30pm	TWS 1100

TLPL475 **Equitable Classrooms**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL252, TLPL413, and TLPL420. Corequisite: EDCI360 and TLPL423. Restriction: Minimum cumulative GPA of 2.75; and must be in Middle School Education program. Credit only granted for: EDCI424 or TLPL475. Formerly: EDCI424.

An exploration and application of major theoretical frameworks surrounding equity and critical pedagogy. Creating habits of mind that help teachers see all students as capable of achieving at high levels. Draws on the concurrent field experience.

0101	Nardos Ghebreab	Seats (Total: 0)
	Tu 10:00am - 12:00pm	ONLINE

TLPL478A **Professional Seminar in Education; Art Education**

Credits: 1 Grading Method: Regular

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

0101	Katherine Coogan	Seats (Total: 20)
	Tu 12:00pm - 1:00pm	ONLINE

TLPL479A **Field Experiences in Education; Art Education**

(Perm req)

Credits: 3 Grading Method: Sat-Fail

Field experiences in approved eduation setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Katherine Coogan	Seats (Total: 10)
	Contact instructor or department for details.	

TLPL479B **Field Experiences in Education; Secondary Social Studies Education**

(Perm req)

Credits: 2 Grading Method: Sat-Fail

Field experiences in approved eduation setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Alison Jovanovic	Seats (Total: 35)
	Contact instructor or department for details.	

TLPL479C **Field Experiences in Education; English Education**

(Perm req)

Credits: 2 Grading Method: Sat-Fail

Field experiences in approved eduation setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Secondary English/speech/drama education majors only. Students must reserve one full day per week for observation.

0101	Peggy Wilson	Seats (Total: 25)
	Contact instructor or department for details.	

TLPL479D **Field Experiences in Education; Secondary Mathematics Education**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Field experiences in approved eduation setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Monica Anthony	Seats (Total: 20)
	Contact instructor or department for details.	

TLPL479E **Field Experiences in Education; Middle School Education**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Field experiences in approved eduation setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Angela Stoltz	Seats (Total: 0)
	Contact instructor or department for details.	

TLPL479F **Field Experiences in Education; Science Education**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Field experiences in approved eduation setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Jennifer Mesiner	Seats (Total: 15)
	Contact instructor or department for details.	

TLPL479J **Field Experiences in Education; Second Language Education**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Field experiences in approved eduation setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Margaret Marcus	Seats (Total: 10)
	Contact instructor or department for details.	

TLPL481 **Embracing Diversity in the Classroom Community**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Admission to teacher education program; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: TLPL481 or EDCI475. Formerly: EDCI475.

An exploration of the richness and complexity of student diversity that teacher candidates will encounter in K-12 classrooms. Students will engage in critical reflection around diversity and equity issues.

0101	Blake Turner, Alexis Young	Seats (Total: 25)
	Tu 3:30pm - 6:15pm	ONLINE

TLPL488B **Special Topics in Education; Teaching Academically, Culturally and Linguistically Divers e Students in Secondary Education**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Sonya Park, Dawn Martin	Seats (Total: 0)
	TuTh 9:00am - 9:50am	ONLINE
0201	Kia McDaniel	Seats (Total: 20)
	W 5:30pm - 7:15pm	ONLINE

TLPL488F **Special Topics in Education; Promoting Skilled and Motivated Readers in Elementary Classrooms (Part 2)**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Peter Afflerbach Tu 12:10pm - 2:45pm	Seats (Total: 0) ONLINE
0201	Erin Hogan W 8:30am - 11:15am	Seats (Total: 0) ONLINE
0301	Rose Cherussery M 8:30am - 11:15am	Seats (Total: 0) ONLINE

TLPL488R **Special Topics in Education; Assessing Language and Literacy Development in Elementary Classrooms**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Tara Johnston M 9:00am - 11:45am	Seats (Total: 24) ONLINE
0201	Peter Afflerbach Tu 9:00am - 11:45am	Seats (Total: 28) ONLINE
0301	Erin Hogan Th 9:00am - 11:45am	Seats (Total: 28) ONLINE

TLPL489 **Internship in Education**

(Perm req)

Credits: 1-12 Grading Method: Regular

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL489A **Internship in Education; Art**

(Perm req)

Credits: 12 Grading Method: Regular

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL489B **Internship in Education; Social Studies/History**

Credits: 1-12 Grading Method: Regular

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL489D **Internship in Education; Mathematics**

(Perm req)

Credits: 12 Grading Method: Regular

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL489G **Internship in Education; TEACHING RESIDENCY**

(Perm req)

Credits: 3 Grading Method: Regular

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

There is a lab fee of $375 associated with this course

0101	Deborah Lewin, Lisa Bote F 12:15pm - 3:05pm Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE
0201	Lisa Bote, Brooke Dalesio F 12:15pm - 3:05pm Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE

0301	Tracy Dunheimer, Lisa Bote F 12:15pm - 3:05pm Class time/details on ELMs	Seats (Total: 0) ONLINE ONLINE

TLPL498 **Special Problems in Education**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to students who have definite plans for study of approved problems.

Contact department for information to register for this course.

TLPL600 **Teaching and Learning with Technology**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Credit only granted for: EDCI687 or TLPL600. Formerly: EDCI687.

Provides a concrete, hands-on introduction to teaching and learning with technology. We will explore digital technology and its impact on learning and institutions. We will consider big ideas of the field as well as specific types of learning technologies and pedagogies for use in K-12 classrooms. We will discuss K-12 teaching methods that address the interdisciplinary nature of technology integration. The course will draw on class discussions, inquiry, instructional technology, and collaborative lab-based activities and prepare you to merge technology with your current teaching practice. Assessment with and of technology will also be explored.

Contact department for information to register for this course.

TLPL606 **Teaching and Learning Mathematics in Secondary Schools**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Enrollment in a University of Maryland program leading to teacher certification; and bachelor's degree in mathematics or related field; and 2 semesters of calculus. Credit only granted for: EDCI651 or TLPL606. Formerly: EDCI651.

Objectives, selection and organization of subject matter, appropriate methods, lesson plans, textbooks, technology and other instructional materials; assessment of student learning and other topics pertinent to secondary mathematics education. Internship of other placement in a secondary mathematics classroom is required.

Prerequisite: Permission of department.

Contact department for information to register for this course.

TLPL607 **Teaching and Learning Mathematics in the Elementary School**

Credits: 3 Grading Method: Regular

Prerequisite: MATH212, MATH213, or MATH214; or students who have taken courses with comparable content may contact the department. Credit only granted for: EDCI652 or TLPL607. Formerly: EDCI652.

Strategies and methodologies for the teaching of elementary school mathematics based on current research and theories about how children learn mathematics. Attention is given to professional recommendations and teaching practices that foster communication, reasoning, and reflection in the mathematics classroom. Internship or other placement in an elementary school is required.

Contact department for information to register for this course.

TLPL610 **Trends in Mathematics Education**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Credit only granted for: EDCI650 or TLPL610. Formerly: EDCI650.

Recent developments in educational thinking and practice which have affected the curriculum in mathematics.

Contact department for information to register for this course.

TLPL616 **Teaching and Learning Statistics in the Middle School**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Admission to M.Ed. or M.A. program in EDCI with concentration in Mathematical Education. Credit only granted for: EDCI656 or TLPL616. Formerly: EDCI656.

Designed to enhance both the pedagogical and statistical/data analysis content knowledge of middle school mathematics teachers.

Contact department for information to register for this course.

TLPL618 **Digital Learning Tools and Communities**

Credits: 1 Grading Method: Regular

Addresses the student learning outcomes outlined by the Interstate Teacher Assessment and Support Consortium(InTASC). When this course is successfully completed, students will be able to competently integrate technology into instruction to support student learning and develop research-based strategies for instructional and school improvement. Students are expected to demonstrate proficiency in each of the seven Maryland Teacher Technology Standards as well as the International Society for Technology Educator Standards.

Contact department for information to register for this course.

TLPL625 **Teaching Science in Elementary Schools**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI671 or TLPL625. Formerly: EDCI671.

Identification of problems in teaching science. Methods for improving the effectiveness of science education.

Contact department for information to register for this course.

TLPL626 **Learning to Teach and Learn Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL420; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Restriction: Must be in the Maryland Master's Certification program; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI675 or TLPL626. Formerly: EDCI675.

Developing practices of instruction in science teaching in the context of understanding student science learning.

Contact department for information to register for this course.

TLPL631 **Historical Foundations of the Arts in Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI601 or TLPL631. Formerly: EDCI601.

An investigation into major historical events and underlying beliefs, values and practices that influence contemporary arts education (visual art, drama, dance, music) at all levels of instruction. Selected literature that focuses on cultural contexts, individuals, institutions, events and national and international perspectives is used to investigate changing conceptions and practices of arts education.

0101	Margaret Walker	Seats (Total: 17)
	Tu 4:15pm - 7:00pm	ONLINE

TLPL633 **Integrated Art Methods**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCI680; or TLPL435. Restriction: Must be in a major within the EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI423, EDCI603, TLPL447 or TLPL633. Formerly: EDCI603.

Builds upon the pedagogical foundation of an initial art education methods course and provides future art teachers with the means for developing PreK-12 art lesson/unit plans for a balanced qualitative art program for today's diverse and inclusive schools/classrooms. Integratin g art with other subject areas.

Contact department for information to register for this course.

TLPL636 **Trends in Secondary School Curriculum: English**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI640 or TLPL636. Formerly: EDCI640.

Recent developments in educational thinking and practice on the curriculum in English education.

Contact department for information to register for this course.

TLPL640 **Assessing, Diagnosing, and Teaching Writing**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI673 or TLPL640. Formerly: EDCI673.

Examines current theory, research, best practice, curricula and materials for teaching written communication in middle and secondary schools in order to survey, review and select formal and informal assessments and diagnostic strategies useful for writing teachers. Focuses on validity and reliability issues. Includes instructional planning and development of instructional materials for implementing appropriate individual, small-group and large-group instruction. English Language Learner (TESOL and SIOP) and special needs (inclusion) pupil issues considered.

Contact department for information to register for this course.

TLPL641 **Reading, Cognition, and Instruction: Reading in the Content Areas I**

Credits: 3 Grading Method: Regular

Credit only granted for: EDCI625 or TLPL641. Formerly: EDCI625.

Provides middle and secondary education students with an understanding of the interactive nature of the reading process, the use of research-based instructional strategies, the relationship between vocabulary development and student concept development, the design of strategic reading instruction, the methods for assessing content area literacy, and the ability to plan instruction and communicate with students, parents, and allied professionals.

Contact department for information to register for this course.

TLPL645 **Content Area Reading**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCI362; or TLPL462; or students who have taken courses with comparable content may contact the department. Credit only granted for: EDCI661 or TLPL645. Formerly: EDCI661.

Research-based strategies for improving reading to learn in the content areas (K-12).

0101	Ying Alice Zhang	Seats (Total: 13)
	Tu 5:00pm - 7:45pm	TWS 0234

TLPL647 **Diagnostic Reading Assessment and Instruction**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI662 or TLPL647. Formerly: EDCI662.

Survey course in diagnostic reading assessment and instruction for graduate students not majoring in reading.

Contact department for information to register for this course.

TLPL650 **Understanding, Evaluating and Using Research in School Reading Programs**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI663 or TLPL650. Formerly: EDCI663.

Focus on understanding, critiquing, and applying reading/literacy research; reviewing research to improve practice; analyzing data at the district, school, classroom, and student levels to improve reading instruction.

0101	Olivia Saracho	Seats (Total: 25)
	Th 5:00pm - 7:45pm	ONLINE

TLPL653 **Clinical Assessment in Reading**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL645 and TLPL650; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI664 or TLPL653. Formerly: EDCI664.

Clinical diagnostic techniques and materials for assessing reading strengths and needs.

0101	Rose Codling	Seats (Total: 25)
	M 5:00pm - 7:45pm	ONLINE

TLPL656 **Teaching Culturally and Linguistically Diverse Exceptional Learners**

Credits: 3 Grading Method: Regular

Credit only granted for: EDCI632 or TLPL656. Formerly: EDCI632.

Explores cross-cultural and linguistic diversity as they relate to identification procedures for and education of English learners with exceptional needs beyond the second language acquisition process such as learning disabilities and gifted & talented.

0101	Drew Fagan	Seats (Total: 20)
	Th 5:00pm - 7:45pm	ONLINE

TLPL657 **Teaching for Cross Cultural Communication**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI633 or TLPL657. Formerly: EDCI633.

Theories of intercultural communication and techniques for applying them in the teaching of English as a second language (ESL) and content classes. Research and evaluation of selected aspects of a culture as basis for creating, selecting and using culturally-responsive teaching materials and methods.

0101	Andres Garcia	Seats (Total: 13)
	W 5:15pm - 8:00pm	ONLINE

TLPL660 **Foundations of Literacy and Biliteracy Development**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL665. Credit only granted for: EDCI636 or TLPL660. Formerly: EDCI636.

An overview of the research on literacy and biliteracy development for English learners. Specifically, the course explores the theoretical models and processes of teaching reading and writing, current literacy/biliteracy issues, assessment, and strategies for developing literacy and biliteracy skills for English learners.

Contact department for information to register for this course.

TLPL661 **Multiliteracies: Theory and Practice**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL665. Credit only granted for: EDCI638, EDCI688J, or TLPL661. Formerly: EDCI638 and EDCI688J.

Explores the theoretical constructs and practical manifestations of multiliteracies in communities and schools by presenting an overview of the research on the constructs of New Literacy Studies, Critical Literacy, Digital Literacy, and Funds of Knowledge, as well as the practical implications of teaching reading and writing to culturally and linguistically diverse learners in content areas (i.e., language arts, math, science, social studies, etc.) in classrooms.

0101	Sarah Moore	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

TLPL662 **Second Language Acquisition**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI732 or TLPL662. Formerly: EDCI732.

Major theoretical approaches to second language acquisition. For teaching English to speakers of other languages (TESOL).

Contact department for information to register for this course.

TLPL664 **Foundations of Second Language Education: Legal, Social and Historical Trends and Issues**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI630 or TLPL664. Formerly: EDCI630.

Knowledge of history, research, current practice and public policy issues in the field of second languague education from kindergarten to post-secondary settings. Required for TESOL certification program.

0101	Jeff MacSwan	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

TLPL665 **Methods of Teaching ESOL**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI634 or TLPL665. Formerly: EDCI634.

This course presents a survey of the historical and current approaches, methods, and techniques of teaching English to speakers of other languages, from grammar to translation to audiolingual and communicative approaches. Additionally, successful classroom practices that address the needs of culturally diverse and language minority students will be analyzed.

0101	Sarah Moore M 5:00pm - 7:45pm	Seats (Total: 20) ONLINE

TLPL666 **English Grammar for Teachers of English to Speakers of Other Languages**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI635 or TLPL666. Formerly: EDCI635.

English grammar and methods of teaching grammar for graduate, prospective and current teachers of English to speakers of other languages. Analysis of the major grammatical structures of American English. Discussion of the role of teaching grammar, and effective classroom methods and techniques for the English as a second/foreign language classroom.

This course will have a modified schedule. Please contact instructor for details.

0101	Kellie Rolstad Tu 5:00pm - 7:45pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

TLPL670 **Economics of Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDPS615 or TLPL670. Formerly: EDPS615.

An introduction to the application of economic principles to the study of education policy. The course content revolves around issues of efficiency, equity, and freedom of choice. Specific attention is devoted to school finance litigation and reform, practices for raising and allocating resources, and education productivity issues.

0101	David Blazar Tu 1:00pm - 3:45pm	Seats (Total: 20) SQH 1120

TLPL674 **Studying Student Learning in Diverse Settings**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI611 or TLPL674. Formerly: EDCI611.

This course deepens teacher understanding of student development and th cultural context for teaching through readings and focused field studies. Participants will also begin developing skills needed for investigations using methods of interpretive inquiry.

Contact department for information to register for this course.

TLPL675 **Embracing Diversity in Classroom Communities**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: EDCI697 or TLPL675. Formerly: EDCI697.

The course aims to help students understand race, class, gender, and sexuality as systems of privilege, exclusion, marginalization, and the centrality of embracing diversity in the classroom communities to promote the success of all students.

0101	Stephanie Brown	Seats (Total: 25)
	Th 4:15pm - 7:00pm	ONLINE

TLPL677 **Reframing Teacher Professionalism: Achieving Teacher Leadership**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: EDCI682 or TLPL677. Formerly: EDCI682.

Understanding the profession of teaching, teacher leadership, and the knowledge base that undergirds the teaching profession. Multiple perspectives on teaching in the current debate on school reform and how they are aligned across the political spectrum.

0101	Donna Wiseman	Seats (Total: 20)
	M 4:15pm - 7:00pm	ONLINE

TLPL678 **Professional Seminar in Education**

Credits: 1-3

Grading Method: Regular, Audit

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

Contact department for information to register for this course.

TLPL685 **Teaching Social Studies in Elementary Schools**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: EDCI622 or TLPL685. Formerly: EDCI622.

Examination of current literature and research in the social sciences as they relate to social studies curriculum and instruction.

Contact department for information to register for this course.

TLPL686 **Secondary Social Studies Pedagogy**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL470; or EDCI680. Credit only granted for: EDCI627 or TLPL686. Formerly: EDCI627.

The second course in a three-course teaching methods sequence. Addresses two key questions: (1) How do secondary school students think about and learn history/social studies? (2) How can secondary teachers teach history/social studies in ways that promote student learning?

Contact department for information to register for this course.

TLPL687 **Politics of Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDPS614 or TLPL687. Formerly: EDPL614.

Educational institutions as political entities. Focuses on conceptual perspectives for examining political dynamics in governmental and organizational contexts. Provides opportunities to carry out original case studies of policy making processes at various levels of the education policy system.

0101	Betty Malen	Seats (Total: 20)
	M 4:15pm - 7:00pm	ONLINE

TLPL688R **Special Topics in Education; Explorations in Mathematics for Elementary Teachers**

Credits: 3 Grading Method: Regular, Audit

Special treatment of current topics and issues in teaching, learning, policy and leadership.

Contact department for information to register for this course.

TLPL689 **Internship in Education**

Credits: 1-9 Grading Method: Regular, Audit

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Student lab fee may apply. Contact program for details.

0101	Margaret Marcus Contact instructor or department for details.	Seats (Total: 10)
0201	Loren Jones Contact instructor or department for details.	Seats (Total: 10)

TLPL691 **Research Methods**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Credit only granted for: EDCI685 or TLPL691. Formerly: EDCI685.

The interpretation and conduct of research relevant to curriculum, teaching and learning.

Contact department for information to register for this course.

TLPL695 **Methods I: K-12 World Language Methods and Technology**

Credits: 3 Grading Method: Regular

Credit only granted for: EDCI410, TLPL445, EDCI688K, or TLPL695. Formerly: EDCI688K. Additional information: Lab and field experiences required.

TLPL 695 requires on-going examination of theories relevant to language acquisition. Students will also investigate the instructional methods that reflect those theories.

0101	Margaret Marcus MW 2:00pm - 3:15pm	Seats (Total: 5) SQH 1120

TLPL696 **Advanced K-12 World Language Methods and Technology**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: TLPL695; and TLPL695. Corequisite: Must be concurrently enrolled in TLPL479J. Credit only granted for: EDCI433, EDCI688A, TLPL450 or TLPL696. Formerly: EDCI688A.

Teaches advanced best practices for effective World Language instruction. Topics include: lesson planning, using authentic assessment and materials, applying national and state standards infusing culture, interdisciplinary content and technology. Classroom management procedures and strategies to create a welcoming and engaging classroom environment. Motivating students and differentiated instruction.

0101	Margaret Marcus	Seats (Total: 5)
	M 5:00pm - 7:45pm	LEF 2205

TLPL698 **Conducting Research on Teaching**

(Perm req)

Credits: 1-3 Grading Method: Regular

Analysis and improvement of educational practice. Research methods used in the study of classroom teaching. Design and conduct of an action research project. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL699 **Master's Seminar**

Credits: 3 Grading Method: Regular, Audit

Directed study for master's degree students writing seminar papers.

Contact department for information to register for this course.

TLPL702 **Theories of Learning and Leadership with Technology**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI788Q or TLPL702. Formerly: EDCI788Q. Additional information: Priority will be given to students in the Technology Learning and Leadership specialization.

Exploration of the impact technology has on how people learn,and how people use technology effectively to facilitate learning. Discussion of theories of designing technology for effective teaching and learning, and examinations of the challenges of implementing technology in education systems.

0101	Sarah McGrew	Seats (Total: 20)
	Tu 1:15pm - 4:00pm	ONLINE

TLPL708A **Special Topics in Technology, Learning & Leadership; Seminar**

Credits: 1 Grading Method: Regular, Audit

Read, plan, conduct, and report on research projects and research topics related to Technology, Learning & Leadership. Projects may be faculty/student projects, or group or individual student projects (may or may not be related to a dissertation). Emphasis on framing researchable questions and designing/analyzing research studies. Faculty and peer feedback and interaction are crucial expectations.

0101	Sarah McGrew	Seats (Total: 10)
	W 1:00pm - 1:50pm	ONLINE

TLPL713 **Mathematics and Science Education Policy, Professional Development and Teacher Preparation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Admitted to Doctoral Program in Mathematics Education or Science Education; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI754 or TLPL713. Formerly: EDCI754.

Preservice teacher education, professional development, and policy as agents of reform in mathematics education and in science education.

0101	Andrew Brantlinger	Seats (Total: 13)
	M 4:15pm - 7:00pm	ONLINE

TLPL728 **Research Seminar in Mathematics and Science Education**

Credits: 1 Grading Method: Regular, Audit

Read, plan, conduct, and report on research projects and research topics in mathematics and science education. Projects may be faculty/student projects, or group or individual student projects (may or may not be related to a dissertation). Emphasis on framing researchable questions and designing/analyzing research studies. Faculty and peer feedback and interaction are crucial expectations.

0101	Andrew Brantlinger	Seats (Total: 13)
	F 10:00am - 1:30pm	TWS 0234

TLPL743 **Teaching English Language Learners: Current and Future Research Directions**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL771 or TLPL662; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI734 or TLPL743. Formerly: EDCI734.

Research on the preparation of generalists and specialists teaching English Language Learners. Current research and future research directions.

0101	Megan Peercy	Seats (Total: 20)
	W 9:00am - 11:45am	ONLINE

TLPL765 **Quantitative Applicaltions for Education Policy Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS645; or students who have taken courses with comparable content may contact the department. Recommended: EDMS646; or EDMS651. Or EDMS646; and EDMS651. Credit only granted for: EDPS703 or TLPL765. Formerly: EDPS703.

Students use quantitative applications and secondary datasets to investigate social problems and education policies. Emphasis on the use of quasi-experimental designs and regression techniques to frame education issues, analyze, and recommend policies.

0101	Jing Liu	Seats (Total: 20)
	M 1:00pm - 3:45pm	TWS 0320

TLPL767 **Law, Equity, and Diversity in Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: TLPL767 or EDPS751. Formerly: EDPS751.

An examination of 'dilemmas of difference' on selected issues that arise at the intersection of law and education policy. Dilemmas and value conflicts imbedded in modern federal and state case law dealing with race, gender, sexual orientation, religion and disability.

0101	Campbell Scribner	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	ONLINE

TLPL788E **Special Topics in Education; Professional Seminar in Urban Education**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Tara Brown	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	ASY 2309

TLPL788N **Special Topics in Education; School Exclusion, Policy, Practice and Prevention**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Tara Brown	Seats (Total: 20)
	W 4:15pm - 7:00pm	ONLINE

TLPL788O **Special Topics in Education; Immigration and Education**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Sophia Rodriguez	Seats (Total: 20)
	M 4:15pm - 7:00pm	ONLINE

TLPL788U **Special Topics in Education; Race, Whiteness, and Identity**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Rossina Liu	Seats (Total: 20)
	Th 7:15pm - 10:00pm	ONLINE

TLPL788W **Special Topics in Education; MA Core: Research Methodologies and Educational Practice**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Daniel Levin	Seats (Total: 20)
	Th 4:15pm - 7:00pm	SQH 1120

TLPL789 **Internship in Education**

Credits: 1-3 Grading Method: Sat-Fail

Approved professional experiences with appropriate supervision. Open only to students admitted to approved master's and doctoral specializations.

Contact department for information to register for this course.

TLPL791 **Qualitative Research I: Design and Fieldwork**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCI790. Credit only granted for: EDCI791 or TLPL791. Formerly: EDCI791.

Examines the theoretical and epistemological moorings of different types of qualitative research. Students apply selected field research methods to problems of professional practice in schools and communities while considering central issues and dilemmas that arise while engaging in fieldwork.

0101	Jennifer Turner	Seats (Total: 20)
	W 4:35pm - 7:20pm	ONLINE

TLPL794 **Foundations of Educational Research I**

Credits: 3 Grading Method: Regular

Restriction: Must be in Teaching and Learning, Policy and Leadership (Doctoral) program. Credit only granted for: EDPS788P or TLPL794. Formerly: EDPS788P.

An introduction to the "contested terrain" of education research. It examines major conceptual, methodological and political issues embedded in efforts to carry out education research and focuses on the development of the analytic dispositions and communication skills required to carry out research that meets the variously defined quality, utility and significance standards of scholarship in the field.

0101	Claudia Galindo	Seats (Total: 25)
	Th 4:15pm - 7:00pm	TWS 0310

TLPL798 **Special Problems in Education**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to master's or doctoral candidates under the direction of their advisors.

Contact department for information to register for this course.

TLPL799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

TLPL888 **Apprenticeship in Education**

(Perm req)

Credits: 1-8 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

Contact department for information to register for this course.

TLPL889 **Internship in Education**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

TLPL898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

TLPL899 **Doctoral Dissertation Research**

(Perm req)

Credits: 1-8 Grading Method: Sat-Fail

Registration required to the extent of 6-9 hours for an Ed.D. Project and 12-18 hours for a Ph.D. Dissertation.

Contact department for information to register for this course.

TLTC Teaching and Learning Transformation Center Fall 2020

TLTC333 **Fundamentals of Academic Peer Mentoring**

(Perm req)

Credits: 1 Grading Method: Regular

How should scientific research influence the way we study and advance the academic performance of others? Learn about the scholarship of teaching and learning and develop the applied skills to support active learning as an academic peer mentor. Whether or not you ultimately pursue a career as an educator, the more effectively you can coach and support the performance of other people, and the more successful you will be. Guided online and face-to-face participation will culminate in a portfolio of your teaching activities and professional development.

Click here for more course information.

0101	Danielle Pafe	Seats (Total: 40)
	Class time/details on ELMs M 10:00am - 10:50am	ONLINE ONLINE
	This section will meet synchronously online on the following dates: Sept. 14, Oct. 12, and Nov. 16.	

0102	Danielle Pafe	Seats (Total: 40)
	Class time/details on ELMs M 3:00pm - 3:50pm	ONLINE ONLINE
	This section will meet synchronously online on the following dates: Sept. 14, Oct. 12, and Nov. 16.	
0103	Danielle Pafe	Seats (Total: 40)
	Class time/details on ELMs M 4:00pm - 4:50pm	ONLINE ONLINE
	This section will meet synchronously online on the following dates: Sept. 14, Oct. 12, and Nov. 16.	
0105	Danielle Pafe	Seats (Total: 40)
	Class time/details on ELMs Tu 11:00am - 11:50am	ONLINE ONLINE
	This section will meet synchronously online on the following dates: Sept. 15, Oct. 13, and Nov. 17.	

TLTC399 **Independent Study in Academic Peer Mentoring**

(Perm req)

Credits: 1-3 Grading Method: Regular

Earn academic credit for the time spent supporting a course in TLTC's Academic Peer Mentoring Program (AMP).

Prerequisite: Must have completed or be concurrently enrolled in TLTC333. Restriction: Permission of TLTC required - enrollment restriction. Repeatable to 6 credits. Earn academic credit for the time spent supporting a course in TLTC's Academic Peer Mentoring Program (AMP).

Contact department for information to register for this course.

TLTC499A **Independent Study in Teaching and Learning**

(Perm req)

Credits: 1-3 Grading Method: Regular

Earn academic credit for the time spent supporting TLTC's educational development programs and/or engaging in the scholarship of teaching and learning.

Restriction: Permission of TLTC required. Contact the department for information to register for this course.

0101	Danielle Pafe	Seats (Total: 10)
	Contact instructor or department for details.	

TLTC798 **University Teaching and Learning**

Credits: 1-2 Grading Method: Regular

Special topic courses directed at experienced graduate teaching assistants who are interested in university teaching and learning issues. Can be used by students for participation in the Universtiy Teaching and Learning Program.

Special topics course directed at experienced graduate teaching assistants who are interested in university teaching and learning issues. Can be used by students for participation in the University Teaching and Learning Program. Click here for more course information: tltc.umd.edu/798

0101	Tami Smith	Seats (Total: 15)
	Tu 2:00pm - 4:00pm	ONLINE

UMEI Maryland English Institute Fall 2020

UMEI004 **English as a Foreign Language: Intermediate III**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Restriction: Permission of EDUC-Dean-Maryland English Institute department.

Intensive course for the non-native speaker of English who has a good command of the basic features of spoken and written English. Emphasis on refining speaking and listening skills, on improving reading speed and comprehension of academic texts, and on developing writing skills for academic courses. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Heather Mehrtens, Charles Duquette, Eric Walker	Seats (Total: 20)
	MTuWThF 9:00am - 11:50am	ONLINE
	MTuWThF 1:00pm - 2:50pm	ONLINE
0301	Charles Duquette, Eric Walker, Heather Mehrtens	Seats (Total: 20)
	MTuWThF 9:00am - 11:50am	ONLINE
	MTuWThF 1:00pm - 2:50pm	ONLINE

UMEI005 **Advanced English as a Foreign Language**

Credits: 6 Grading Method: Sat-Fail, Audit

Semi-intensive course for the nearly proficient non-native speaker of English needing additional language instruction prior to undertaking full-time academic study. Speaking and listening skills; improvement of reading speed and comprehension; and development of writing skills. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Annelies Galletta MTuThF 9:00am - 10:50am *This section is restricted to Graduate Students.*	Seats (Total: 15) ONLINE
0401	Marilena Draganescu MTuThF 9:00am - 10:50am *This section is restricted to Undergraduate Students.*	Seats (Total: 15) ONLINE

UMEI006 **English Pronunciation**

(Perm req)

Credits: 2 Grading Method: Sat-Fail, Audit

Restriction: Must have graduate standing.

Individualized class for the non-native speaker of English. Diagnosis of individual pronunciation problems. Practice in the correct pronunciation of English sounds and improvement of ability to speak English with proper stress and intonation patterns. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0201	Raymond Smith TuTh 9:00am - 10:30am	Seats (Total: 16) ONLINE

UMEI007 **Advanced Writing for International Students**

Credits: 3 Grading Method: Sat-Fail, Audit

Restriction: Must have graduate standing.

A writing skills course for the non-native speaker of English with a good command of spoken English. This course does not carry credit towards any degree at the University and does not count in the retention plan.

Restriction: Must have graduate standing.

0201	Cornell Brellenthin TuTh 9:00am - 10:50am	Seats (Total: 16) ONLINE

UNIV University Courses Fall 2020

UNIV099 **Internship Seminar**

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Complements students' supervised work experiences. Open to all majors; all class levels. Involves exploring career options, developing professional work skills, examining the relationship between internship and academic coursework. Course may be repeated.

0101	Erica Ely, Trisha Hongcharti Contact instructor or department for details.	Seats (Total: 90)

UNIV100 **The Student in the University**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: EDCP108O or UNIV100. Formerly: EDCP108O.

Introduces students to University life. In a small classroom setting, students will explore how to successfully bridge the gap between high school and college. Study skills, career decision-making, and student development processes will be explored.

0101	Michelle Udeli **Meets September 8, 2020 - November 20, 2020** Tu 11:00am - 12:20pm *Restricted to first semester students enrolled in UTerp program.*	Seats (Total: 20) ONLINE
0201	Laila Asi, Kenneth Kokason M 10:00am - 11:50am Class time/details on ELMs *Restricted to First Semester BSOS Majors.*	Seats (Total: 25) TWS 0310 ONLINE
0202	Cayla Cwerner, Hermione Pickett W 1:00pm - 2:50pm *Restricted to First Semester BSOS Majors.*	Seats (Total: 25) ONLINE
0203	Christa Slavin Th 3:00pm - 4:50pm *Restricted to First Semester BSOS Majors.*	Seats (Total: 25) ONLINE

0204	Esme Pierzchala, Christie Cradock Tu 10:00am - 11:50am *Restricted to First Semester BSOS Majors.*	Seats (Total: 25) ONLINE
0205	Bailey Kier W 3:00pm - 4:50pm *Restricted to First Semester BSOS Majors.*	Seats (Total: 25) ONLINE
0206	TC Lloyd Th 10:00am - 11:50am *Restricted to First Semester BSOS Majors.*	Seats (Total: 25) ONLINE
0207	Rosalyn Anderson-Howell Tu 3:00pm - 4:50pm *Restricted to First Semester BSOS Majors.*	Seats (Total: 25) ONLINE
0208	Kimberly Bethke M 3:00pm - 4:50pm *Restricted to First Semester BSOS Majors.*	Seats (Total: 25) ONLINE
0305	Christopher Lester W 6:00pm - 7:50pm *Restricted to OMSE - College Success Scholars. Class will meet in TWS 1310.*	Seats (Total: 20) ONLINE
0306	Christopher Lester W 6:00pm - 7:50pm *Restricted to OMSE - College Success Scholars. Class will meet in Room TWS 1310.*	Seats (Total: 20) ONLINE
0501	Christie De Leon W 2:00pm - 3:50pm *Restricted to students in the College of Education.*	Seats (Total: 20) ONLINE
0502	Brittani Berry Th 1:00pm - 2:50pm *Restricted to students in the College of Education.*	Seats (Total: 20) ONLINE

0604	Shannon Bate **Meets September 8, 2020 - November 20, 2020** F 9:00am - 10:30am *Restricted to engineering incoming freshmen.*	Seats (Total: 20) ONLINE
0801	Thomas Steen **Meets September 8, 2020 - November 20, 2020** M 2:00pm - 3:50pm *Restricted to First Semester Letters and Sciences students.*	Seats (Total: 20) ONLINE
0802	Devyn Sturdavant **Meets September 8, 2020 - November 20, 2020** Tu 2:00pm - 3:50pm *Restricted to First Semester Letters and Sciences students.*	Seats (Total: 20) ONLINE
0804	Nicki Kern **Meets September 8, 2020 - November 20, 2020** Th 3:30pm - 5:30pm *Restricted to First Semester Letters and Sciences students interested in Pre-law.*	Seats (Total: 20) ONLINE
0806	Noah Jacobs **Meets September 8, 2020 - November 20, 2020** W 3:30pm - 5:20pm *Restricted to First Semester Letters and Sciences students.*	Seats (Total: 20) ONLINE
0807	Ashley Broomes **Meets September 8, 2020 - November 20, 2020** Tu 11:00am - 12:50pm *For first semester Letters and Sciences students who are interested in STEM (science, technology, mathematics, engineering) majors or careers. Part of the STEM Exploration Series.*	Seats (Total: 20) ONLINE

0808	Alexis Foley **Meets September 8, 2020 - November 20, 2020** Tu 2:00pm - 3:50pm	Seats (Total: 20) ONLINE
	For first semester Letters and Sciences students who are interested in STEM (science, technology, mathematics, engineering) majors or careers. Part of the STEM Exploration Series.	
0812	Sarah Wilson **Meets September 8, 2020 - November 20, 2020** Tu 12:30pm - 2:20pm	Seats (Total: 20) ONLINE
	For first semester Letters and Sciences students who are interested in STEM (science, technology, mathematics, engineering) majors or careers. Part of the STEM Exploration Series.	
0815	Matthew Hicks **Meets September 8, 2020 - November 20, 2020** W 9:00am - 10:50am	Seats (Total: 20) ONLINE
	Restricted to First Semester Letters and Sciences students.	
0820	Yenti Sunarto **Meets September 8, 2020 - November 20, 2020** Th 12:30pm - 2:20pm	Seats (Total: 20) ONLINE
	For first semester Letters and Sciences students who are interested in STEM (science, technology, mathematics, engineering) majors or careers. Part of the STEM Exploration Series.	
0826	Anita Weisburger **Meets September 8, 2020 - November 20, 2020** M 3:30pm - 5:20pm	Seats (Total: 20) ONLINE
	Restricted to First Semester Letters and Sciences students.	

0841	Amanda Lefky **Meets September 8, 2020 - November 20, 2020** Tu 3:30pm - 5:20pm *Restricted to First Semester Letters and Sciences students.*	Seats (Total: 20) ONLINE
0850	Lisa Scheeler **Meets September 8, 2020 - November 20, 2020** W 1:00pm - 2:50pm *For first semester Letters and Sciences students interested in business. Part of the Business Exploration Series.*	Seats (Total: 20) ONLINE
0851	Gaby Hernandez **Meets September 8, 2020 - November 20, 2020** M 1:00pm - 2:50pm *For first semester Letters and Sciences students interested in business. Part of the Business Exploration Series.*	Seats (Total: 20) ONLINE
0852	Iceney Williams **Meets September 8, 2020 - November 20, 2020** W 3:00pm - 4:50pm *For first semester Letters and Sciences students who are interested in STEM (science, technology, mathematics, engrineering) majors or careers. Part of the STEM Exploration Series.*	Seats (Total: 20) ONLINE
0854	Marchelle Payne-Gassaway **Meets September 8, 2020 - November 20, 2020** M 2:00pm - 3:50pm *For first semester Letters and Sciences students who are interested in STEM (Science, Technology, Mathematics, Engineering) majors or careers. Part of the STEM Exploration Series.*	Seats (Total: 20) ONLINE

0857	Steve Leonard **Meets September 8, 2020 - November 20, 2020** W 1:00pm - 2:50pm *Restricted to First Semester Letters and Sciences students.*	Seats (Total: 20) TWS 1310
0901	Logan Dechter Tu 9:00am - 10:50am *Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).*	Seats (Total: 20) SYM 0200
0902	Thomas Gleason M 3:00pm - 4:50pm *Restricted to Physics majors 19020 and 1902E.*	Seats (Total: 20) ONLINE
0903	Jennie Gouker Tu 2:00pm - 3:50pm *Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code: 12031).*	Seats (Total: 20) ONLINE
0904	Gene Ferrick Th 10:00am - 11:50am *Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).*	Seats (Total: 20) MCB 1207
0905	Anne Richardson Tu 11:00am - 12:50pm Class time/details on ELMs *Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).*	Seats (Total: 20) TWS 0310 ONLINE
0906	Marsha Guenzler-Stevens Tu 1:00pm - 2:50pm *Restricted to Biofire.*	Seats (Total: 20) ESJ 2208
0908	Arman Liwanag M 2:00pm - 3:50pm *Restricted to Neuroscience majors - 04250.*	Seats (Total: 20) ONLINE
0909	Kasey Ezzat, Kendra Lewis W 10:00am - 11:50am *Restricted to BSCI-BCHM-CHEM majors or UMB-Nursing students (major code 12031).*	Seats (Total: 20) ONLINE

0910	Amy Alexander M 2:00pm - 3:50pm *Restricted to CMNS majors.*	Seats (Total: 20) ONLINE
0912	Gerry Strumpf W 12:00pm - 1:50pm *Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).*	Seats (Total: 15) ONLINE
0915	Eden Garosi M 1:00pm - 2:50pm *Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).*	Seats (Total: 20) ONLINE
0916	Kayla Cullum Tu 10:00am - 11:50am *Restricted to Nursing Pathways 12031.*	Seats (Total: 20) ONLINE
0917	James McClellan F 1:00pm - 2:50pm *Restricted to College Park scholars.*	Seats (Total: 20) ONLINE
0918	Victoria Fitzgerald W 2:00pm - 3:50pm *Restricted to Neuroscience majors - 04250.*	Seats (Total: 20) ONLINE
0919	Gelila Haile Th 3:00pm - 4:50pm *Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).*	Seats (Total: 20) ONLINE
0920	Stephanie Bent F 1:00pm - 2:50pm *Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).*	Seats (Total: 20) ONLINE
0925	Justin Nero W 1:00pm - 2:50pm *Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).*	Seats (Total: 20) ONLINE

0926	Jennifer Carrion M 2:00pm - 3:50pm Class time/details on ELMs *Restricted to BioFIRE students.*	Seats (Total: 30) SYM 0200 ONLINE
0927	Shreya Singh Tu 2:00pm - 3:50pm *Restricted for BioFire students.*	Seats (Total: 20) SYM 0200
1101	Gregory Weaver Tu 9:30am - 10:45am *Restricted to ARCH majors only; cannot be dropped without permission from college.*	Seats (Total: 18) ONLINE
1103	Gregory Weaver Tu 11:00am - 12:15pm *Restricted to ARCH majors only; cannot be dropped without permission from college.*	Seats (Total: 18) ONLINE
1201	Taylor Sanders M 1:00pm - 2:15pm *Restricted to SPHL majors only; cannot be dropped without permission from college.*	Seats (Total: 20) ONLINE
1202	Renee Stokes M 3:00pm - 4:15pm *Restricted to SPHL majors only; cannot be dropped without permission from college.*	Seats (Total: 20) ONLINE
1203	Felicia Low Tu 9:30am - 10:45am *Restricted to SPHL majors only; cannot be dropped without permission from college.*	Seats (Total: 20) ONLINE
1204	Kendyl Oliver Tu 2:00pm - 3:15pm *Restricted to SPHL majors only; cannot be dropped without permission from college.*	Seats (Total: 20) ONLINE
1205	Lindsey Winter W 11:00am - 12:15pm *Restricted to SPHL majors only; cannot be dropped without permission from college.*	Seats (Total: 20) ONLINE

1206	Bryan Pointer W 1:00pm - 2:15pm	Seats (Total: 20) ONLINE
	Restricted to SPHL majors only; cannot be dropped without permission from college.	
1207	Erin Caporellie Th 9:30am - 10:45am	Seats (Total: 20) ONLINE
	Restricted to SPHL majors only; cannot be dropped without permission from college.	
1208	Matthew Wootten Th 2:00pm - 3:15pm	Seats (Total: 20) ONLINE
	Restricted to SPHL majors only; cannot be dropped without permission from college.	
1501	Heather Buchanan Th 2:00pm - 3:50pm	Seats (Total: 20) ONLINE
	Restricted to College of Agriculture and Natural Resources, First Year or Transfer Students.	
1503	Jill Janofsky M 2:00pm - 3:50pm	Seats (Total: 20) ONLINE
	Restricted to College of Agriculture and Natural Resources, First Year or Transfer Students.	
FC01	Shelby Byrd M 7:30pm - 8:45pm	Seats (Total: 18) ONLINE
	Restricted to students in Freshmen Connection.	
FC02	Lenaya Stewart M 4:30pm - 5:45pm	Seats (Total: 18) ONLINE
	Restricted to students in Freshmen Connection.	
FC03	Anne Baum F 10:00am - 11:15am	Seats (Total: 18) ONLINE
	Restricted to students in Freshmen Connection.	
FC04	Tori Shay F 1:00pm - 2:15pm	Seats (Total: 18) ONLINE
	Restricted to students in Freshmen Connection.	

FC05	Kristin LaRiviere, Raymond Nardella W 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC06	Ashleigh Brown W 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC07	Denise McHugh Th 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) BPS 1250
FC08	Steven Young M 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC09	Kenneth Kokason F 11:30am - 12:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC10	Sharon Vanwright F 11:30am - 12:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC11	Steven Young F 1:00pm - 2:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC12	La'Mon Johnson M 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC13	Marchelle Payne-Gassaway M 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC14	Malina Blanton Heng Th 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE

FC15	Susan Johnston F 11:30am - 12:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC16	Sarah Wilson F 10:00am - 11:15am *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC17	Lori Kader Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC19	Zabrina Anzyl F 1:00pm - 2:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC20	Felicia Low Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC21	Eric Johnson Th 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC22	Tori Darby Th 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC23	Lyndsy Horn M 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC24	Alison Barlow Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC25	Drew Barker F 11:30am - 12:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE

FC26	Erik Hanson Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC27	Fabian Faccio Th 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC28	Matthew Sinclair F 11:30am - 12:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) BPS 1250
FC29	Melanie Ashton Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC30	Jamie Stednitz Tu 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC31	Lori Kader F 11:30am - 12:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC32	Kendyl Oliver Th 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC33	Jasmine Kelly Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ESJ 1224
FC34	Matthew Sinclair Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ESJ 2208
FC35	Ebony Fullwood F 11:30am - 12:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE

FC36	Tori Darby M 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC37	Kevin McGann M 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC38	Joel Solorzano Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC39	Kristin LaRiviere F 10:00am - 11:15am *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC40	Madeline Reich W 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) TWS 0320
FC41	Thomas Steen Tu 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC42	Iceney Williams Tu 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC43	TC Lloyd F 1:00pm - 2:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC44	Rajan Parikh Tu 3:00pm - 4:15pm *Restricted to students in Freshman Connection.*	Seats (Total: 18) ONLINE
FC45	Amanda Bachert W 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE

FC47	Devyn Sturdavant Tu 4:30pm - 5:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC49	Veronica Perrigan Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC50	Jamie Stednitz Tu 3:00pm - 4:15pm	Seats (Total: 18) ONLINE
FC51	Olive Reid Tu 6:00pm - 7:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC52	Mariah Bauer F 10:00am - 11:15am *Restricted to students in Freshmen Connection*	Seats (Total: 18) ONLINE
FC53	Lenaya Stewart M 3:00pm - 4:15pm	Seats (Total: 18) ONLINE
FC56	Andrew Muir W 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC57	Arman Liwanag W 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC59	Janae Cruz M 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE
FC60	Lauren Neimeyer Tu 3:00pm - 4:15pm *Restricted to students in Freshmen Connection.*	Seats (Total: 18) ONLINE

UNIV100V The Student in the University

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: EDCP108O or UNIV100. Formerly: EDCP108O.

Introduces students to University life. In a small classroom setting, students will explore how to successfully bridge the gap between high school and college. Study skills, career decision-making, and student development processes will be explored.

0101	Tasha Vanterpool M 3:30pm - 5:30pm	Seats (Total: 25) Location: TBA
	This section is reserved for VETERANS ONLY. DD214 required for verification.	

UNIV106 The Transfer Student in the University

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be a first-semester Letters and Sciences transfer student. Credit only granted for: UNIV106 or EDCP108G.

For transfer students in Letters and Sciences. This course is designed to assist students in making a successful transition to the University of Maryland (UMD) and to serve as an extended orientation to campus living and learning.

0101	JV Sapinoso Tu 11:00am - 12:15pm	Seats (Total: 20) ONLINE
0201	Melissa Hyre Th 2:00pm - 3:15pm	Seats (Total: 20) ONLINE
0301	Jeffrey Kodis W 3:00pm - 4:15pm	Seats (Total: 20) ONLINE

UNIV108 Business Exploration Series Colloquium

Credits: 1 Grading Method: Regular

For students interested in pursuing a business career. Students learn the fundamentals of career development and what the internship/job search process entails.

For students interested in pursuing a business career. Students learn the fundamentals of career development and what the internship/job search process entails.

FC01	Lisa Scheeler, Gaby Hernandez Th 6:00pm - 6:50pm Tu 6:00pm - 6:50pm *Restricted to students in Freshmen Connection.*	Seats (Total: 22) ONLINE ONLINE	Discussion
FC02	Iceney Williams, Lisa Scheeler, Gaby Hernandez Th 6:00pm - 6:50pm Tu 6:00pm - 6:50pm *Restricted to students in Freshmen Connection.*	Seats (Total: 22) ONLINE ONLINE	Discussion
FC04	Lisa Scheeler, Gaby Hernandez Th 6:00pm - 6:50pm F 1:30pm - 2:20pm *Restricted to students in Freshmen Connection.*	Seats (Total: 22) ONLINE ONLINE	Discussion

UNIV110 **Grand Challenges of Our Time**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Permission of department.

An overview of the issues of our time, including COVID-19, Black Lives Matter, Climate Change and Voting.

Contact department for information to register for this course.

UNIV269 **Connecting Across Cultures**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

An examination of culture to guide study abroad students through the stages of cross cultural adjustment and to promote cultural competency by providing the motivation, knowledge and skills necessary to work with diverse individuals and teams.

Contact department for information to register for this course.

UNIV269A **Connecting Across Cultures; Cultural Realities of Spain**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

An examination of culture to guide study abroad students through the stages of cross cultural adjustment and to promote cultural competency by providing the motivation, knowledge and skills necessary to work with diverse individuals and teams.

Contact department for information to register for this course.

UNIV362 **Designing Your Life after College**

Credits: 2 Grading Method: Regular

Restriction: Must have earned a minimum of 60 credits.

Helps students anticipate and prepare for changes in finances, social life, health, and career dynamics they are likely to experience as they transition from college to working full-time. It focuses on understanding what resources students have as they enter the workforce as critical for navigating post-graduation changes successfully. It offers an overview of financial, risk management and professional development approaches to increase students' confidence regarding post-graduation decisions; in addition, it develops their creative problem solving and reflection skills to help them align the outcomes of their decisions with their values.

0101	Ann Holmes Tu 4:30pm - 6:30pm	Seats (Total: 25) ONLINE
0102	Gerry Strumpf Tu 4:30pm - 6:30pm	Seats (Total: 25) ONLINE
0103	Matthew Hicks Tu 4:30pm - 6:30pm	Seats (Total: 25) ONLINE

UNIV389J **Special Topics in Undergraduate Studies; Federal Independent Study Projects**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Courses will focus on interdisciplinary topics and will be planned in cooperation with Undergraduate Studies.

Prerequisite: Permission of instructor.

0101	Joan Burton Class time/details on ELMs	Seats (Total: 25) ONLINE
0201	Joan Burton Class time/details on ELMs	Seats (Total: 25) ONLINE

UNIV399 **Experiential Learning in Undergraduate Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular

Experiential learning offered in conjunction with certain designated Office of Undergraduate Studies programs.

0201	Joan Burton	Seats (Total: 10)	
	Class time/details on ELMs	ONLINE	

URSP Urban Studies and Planning Fall 2020

URSP250 **The Sustainable City: Exploring Opportunities and Challanges**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSSP, SCIS

An exploration, through an interdisciplinary approach, of a number of issues related to making cities more sustainable in terms of environmental protection, economic opportunity, and social justice. The course assist students to develop skills in critical analysis and systems thinking and to use those skills in analyzing sustainability related problems and potential solutions, and to expand students' understanding of the political implications of crafting and moving towards a sustainable urban future.

0101	Marccus Hendricks	Seats (Total: 26)	
	M 11:00am - 12:15pm	ONLINE	
	W 11:00am - 12:15pm	ONLINE	Discussion
0102	Marccus Hendricks	Seats (Total: 26)	
	M 11:00am - 12:15pm	ONLINE	
	W 11:00am - 12:15pm	ONLINE	Discussion
0103	Marccus Hendricks	Seats (Total: 26)	
	M 11:00am - 12:15pm	ONLINE	
	W 11:00am - 12:15pm	ONLINE	Discussion

URSP399I **Independent Study**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Directed research and study of selected aspects of urban affairs.

Contact department for information to register for this course.

URSP601 **Research Methods**

Credits: 3 | Grading Method: Regular, Audit

Recommended: An undergraduate-level statistics course; and familiarity with Microsoft Excel. Formerly: URBS601.

Use of measurement, statistics, quantitative analysis, and micro-computers in urban studies and planning.

0101	Chengri Ding	Seats (Total: 15)
	W 7:00pm - 9:40pm	ONLINE

URSP603 **Land Use Planning: Concepts and Techniques**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: URSP603, URBS680, or URBS603. Formerly: URBS603.

Land use concepts and definitions: legal context for planning; markets and planning; planning for housing; community services, employment, utilities, and transportation; zoning; subdivision regulations; growth management; plan implementation.

0101	Arnold Keller, Margaret Giblin	Seats (Total: 20)
	Th 7:00pm - 9:40pm	ONLINE

URSP605 **Planning History and Theory**

Credits: 3 Grading Method: Regular, Audit

Examination of key, selected major events and issues in U.S. planning history and the development of the [planning profession; exploration of major themes in planning theory and practical applications of them; and analysis of the relationship of history and theory.

0101	Brittney Drakeford	Seats (Total: 25)
	Tu 4:00pm - 6:40pm	ONLINE

URSP606 **Planning Economics**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed URSP630. Credit only granted for: URSP606, URBS606, or URBS630. Formerly: URBS606.

Resource allocation in a market economy, the nature of market failures, and the justifications for public sector intervention. The limits and possibilities for planning in a market economy.

0101	Chengri Ding	Seats (Total: 15)
	M 4:00pm - 6:30pm	ONLINE

URSP688C **Recent Developments in Urban Studies; International Development Planning**

Credits: 3 Grading Method: Regular, Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

Contact department for information to register for this course.

URSP688L **Recent Developments in Urban Studies; Planning Technology**

Credits: 3 Grading Method: Regular, Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

An introduction to technologies that are vital for contemporary planners. Whether planners work at the local, state, or federal level, for-profit or non-profit, urban or rural, or with targeted neighborhoods or regional entities, the necessity for planners to, at a minimum, understand technologies is paramount. These technologies are used to plan, develop, manage, and analyze geographic areas and their respective populations. Given the past, present, and assuredly future ubiquity of Geographic Information Systems (GIS), this course's major focus will be on developing analytical and visual GIS skills. Parallel to acquiring initial GIS skills using the most current and widespread software platforms for GIS, students will employ real-life 'hands-on' experience alongside instruction for analysis and visualization both in the static/desktop environments as well as in more dynamic/web environments.

0101	Andrew Bernish	Seats (Total: 20)
	Tu 7:00pm - 9:40pm	ONLINE

URSP688N **Recent Developments in Urban Studies; Urban Transportation Planning and Policy**

Credits: 3 Grading Method: Regular, Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

Contact department for information to register for this course.

URSP688Z **Recent Developments in Urban Studies; Planning & Design in the Multicultural Metropolis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

0101	Willow Lung Amam	Seats (Total: 14)
	W 4:00pm - 6:40pm	ONLINE

URSP708 **Community Planning Studio**

Credits: 6 Grading Method: Regular, Audit

The Community Planning Studio is a "capstone" course intended to provide students with an opportunity to apply their knowledge and skills to analyze current, pressing planning issues, in a selected community and to produce a report containing recommendations for addressing those issues. In essence, students act as a consulting team for a community client.

0101	Uri Avin	Seats (Total: 12)
	M 7:00pm - 9:40pm	ONLINE
	W 7:00pm - 9:40pm	ONLINE

URSP709 **Field Instruction**

Credits: 3 Grading Method: Regular, Audit

Students will satisfy a 300-hour internship (20 hours for 15 weeks during the spring, 25 hours a week for 12 weeks during the summer). Suitable internships are approved by the Internship Coordinator or Instructor; they involve a significant amount of planning work (preferably in the student's are of interest) and provide an appropriate on-site supervisor. The Internship Coordinator will assist students in finding a suitable internship, but the ultimate responsibility rests with each student. Whether the internship is paid or not is a matter to be worked out between the student and the organization.

0101	Casey Dawkins	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
0102	Ariel Bierbaum	Seats (Total: 5)
	Class time/details on ELMs	ONLINE
1001	Gerrit Knaap	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
1201	Chengri Ding	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

1401	Marccus Hendricks Class time/details on ELMs	Seats (Total: 20) ONLINE
1501	Ariel Bierbaum Class time/details on ELMs	Seats (Total: 20) ONLINE
1601	Hiroyuki Iseki Class time/details on ELMs	Seats (Total: 20) ONLINE
1701	Casey Dawkins Class time/details on ELMs	Seats (Total: 20) ONLINE
2103	Willow Lung Amam Class time/details on ELMs	Seats (Total: 20) ONLINE

URSP710 **Research Seminar: Urban Theory and Issues**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 15 credits in URSP courses. Restriction: Must be in Urban and Regional Planning and Design (Doctoral) program. Formerly: URBS710.

An advanced research seminar for M.A. and M.C.P. students preparing their final research projects.

0101	Instructor: TBA Class time/details on ELMs	Seats (Total: 10) ONLINE

URSP788 **Independent Study in Urban Studies and Planning**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Directed research and study of selected aspects of urban affairs.

Contact department for information to register for this course.

URSP798 **Readings in Urban Studies and Planning**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Directed readings in selected aspects of urban affairs and planning.

Contact department for information to register for this course.

URSP799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

URSP804 **Advanced Planning Theory**

Credits: 3 Grading Method: Regular, Audit

Relations between theory and practice in planning. Ways of developing and using knowledge in collective action. Challenges to organizing for planning, finding knowledge useful for planning and balancing social attachments with free inquiry.

Restricted to majors only.

0101	Casey Dawkins	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

URSP810 **Contemporary Metropolitan Issues**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Urban and Regional Planning and Design (Doctoral) program.

Introduces Ph.D. students to current metropolitan issues. Focus is on the historical development of the issue, problem definition, methodological approaches to its study, methodological dilemmas, and the ways that different conclusions are translated into policy. Topics vary from semester to semester but include such topics as the spatial mismatch hpothesis, the impact of urban design and form on travel behavior, the impact of technology on urban form, the justification for historic preservation, and sustainable development.

0101	Gerrit Knaap	Seats (Total: 10)
	M 1:00pm - 3:40pm	ONLINE

URSP898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Selected topics in Urban Studies and Planning. Topics will vary with the instructor.

Contact department for information to register for this course.

URSP899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

This course is a required course for the Ph.D program in Urban and Regional Planning and Design.

Contact department for information to register for this course.

USLT Latina/o Studies Fall 2020

Please visit http://amst.umd.edu/programs/course/ for more course information.

USLT201 **U.S. Latina/o Studies I: An Historical Overview to the 1960's**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D

Interdisciplinary course focusing on demographics, terminology and social constructs of race, class, ethnicity, indigeneity, gender, and sexuality associated with the historical and political roots of US Latinidades. Examines the formation, evolution an adaptation of US Latina/o communities as critical field of inquiry.

0101	Robert Chester	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ONLINE

USLT369A **Special Topics in Study Abroad III; Thinking in Andalusian: The Antonio Machado Family of Seville**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

USLT498A **US Latina/o Studies: Special Topics; Latinos/as on the Silver Screen**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Specific content to be announced when courses are offered.

Cross-listed with AMST498G. Credit granted for USLT498A or AMST498G. Beginning with the era of silent film and concluding with contemporary cinema, we explore the ambiguous and shifting history of U.S. Latina/o/xs both behind and in front of the camera. Combining media theory and film history, the course examines Hollywood studio productions of the mid-20th century and independent, Latinx made films of more recent years.

0101	Robert Chester	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ONLINE

USLT498E **US Latina/o Studies: Special Topics; African American and Latino Social, Cultural and Political Relations: 1940 to Present**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Specific content to be announced when courses are offered.

Cross-listed with AASP498O. Credit granted for USLT498E or AASP498O.

0101	Jason Nichols	Seats (Total: 35)
	W 4:00pm - 6:30pm	ONLINE

VMSC Veterinary Medical Sciences Fall 2020

VMSC610 **Recombinant Viral Vectors**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor.

A comprehensive presentation of information on the molecular biology of the most relevent viral vectors developed to date and give insight on vector contruction, purification and utilization. Also intended for students in virology and related fields as well as to those interested in the application of viral vectors to basic research.

0101	George Belov	Seats (Total: 10)
	Contact instructor or department for details.	

VMSC689 **Use of Genomics and Proteomics in Infectious Disease**

Credits: 3 Grading Method: Regular, Audit

Focus is placed on current biotechnological development and recent research breakthroughs in the field of genomics and proteomics as it relates to infectious disease and drug/vaccine development.

0101	Utpal Pal, Daniel Nelson	Seats (Total: 15)
	F 1:00pm - 4:00pm	Location: TBA

VMSC698 **Seminar in Veterinary Medical Science**

Credits: 1-3 Grading Method: Regular

Presentation and discussion of scientific publications, current topics and new methodologies related to veterinary medical sciences.

Class will meet in 1216 Gudelsky Building.

0101	Sean Riley	Seats (Total: 20)
	Th 11:00am - 12:00pm	GVC 1216

VMSC699 **Special Problems in Veterinary Medical Sciences**

Credits: 1-4 Grading Method: Regular

Independent study of a specific problem related to veterinary medicine such as a disease outbreak, application of a new diagnostic test or a risk analysis related to animal health. Targeted at veterinary medicine (DVM) students and other graduate students with a background in veterinary medicine.

Contact department for information to register for this course.

VMSC760 **Immunology of Infectious Diseases**

Credits: 3 Grading Method: Regular, Audit

An advanced graduate level course that focuses on the cutting-edge knowledge of immunity and recent research breakthroughs in the interactions between host immune system and infectious pathogen, and vaccine development

0101	Meiqing Shi	Seats (Total: 25)
	TuTh 1:45pm - 3:00pm	Location: TBA

VMSC780 **Parasites of Medical and Veterinary Importance**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Permission of instructor.

Provides students with the basic knowledge of parasites as well as research advancement in important parasites of humans and animals. Particular attention will be given to parasite biology, pathogenesis, and host responses to parasitic infection. A selection of parasites of medical and veterinary importance will be specifically covered with emphasis on recent research breakthroughs in the field.

Contact department for information to register for this course.

VMSC799 **Thesis Research**

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

VMSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

VMSC899 **Dissertation Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

WMST Women's Studies Fall 2020

WMST200 **Introduction to WGSS: Gender, Power, and Society**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB, D | General Education: DSHS, DVUP

Credit only granted for: WMST200 or WGSS200. Formerly: WMST200.

Examines constructions of race, class, sexuality, ability, and gender relations from a social science multi-disciplinary perspective. The course interrogates the ways that systems of hierarchy and privilege are created, enforced, and intersect through the language of race, class, sexuality, and national belonging. The course will provide students with the skills to examine how systems of power manifest in areas such as poverty, division of labor, health disparities, policing, violence. In addition to examining the impact of systems of power, students will reflect on their own location within the exercise of racialized, and gendered power relations. This course encourages students to understand and critique these systems both personally and politically.

0101	Clara Montague MWF 9:00am - 9:50am	Seats (Total: 30) ONLINE
0201	Clara Montague MWF 11:00am - 11:50am	Seats (Total: 25) ONLINE
0301	Melissa Stevens TuTh 8:00am - 9:15am	Seats (Total: 30) ONLINE

WMST250 **Introduction to WGSS: Art and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA, D | General Education: DSHU, DVUP

Credit only granted for: WMST250 or WGSS250. Formerly: WMST250.

Provides students with a critical introduction to the ways that art and art activism have served as a conduit to understanding and challenging systems of inequity and practices of normativity. Interrogating the categories of gender, sexuality, race, class, ability, the course will provide students with an examination of how artists have responded to pressing social justice issues of their eras. While the course centers visual art, students will also engage genres such as music, plays, literature, digital and performance art as arenas of social change.

0201	Amira Lundy-Harris TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE
0301	Amira Lundy-Harris TuTh 9:30am - 10:45am	Seats (Total: 30) ONLINE
0401	Rahma Haji TuTh 2:00pm - 3:15pm	Seats (Total: 30) ONLINE
0501	Otis Ramsey-Zoe TuTh 11:00am - 12:15pm	Seats (Total: 25) ONLINE
0701	Adreanna Nattiel MWF 11:00am - 11:50am	Seats (Total: 30) ONLINE
0801	Sarah Scriven MWF 12:00pm - 12:50pm	Seats (Total: 25) ONLINE
1001	Lenora Knowles MWF 9:00am - 9:50am	Seats (Total: 30) ONLINE
1201	Jocelyn Coates MWF 3:00pm - 3:50pm	Seats (Total: 30) ONLINE
1301	Taylor York MWF 10:00am - 10:50am	Seats (Total: 25) ONLINE
1401	Jocelyn Coates MWF 1:00pm - 1:50pm	Seats (Total: 25) ONLINE
1501	Lenora Knowles MWF 2:00pm - 2:50pm	Seats (Total: 30) ONLINE

FC01	Melissa Stevens MW 7:30pm - 8:45pm *Restricted to students in Freshmen Connection.*	Seats (Total: 23) ONLINE	
FC02	Taylor York M 3:00pm - 4:15pm Class time/details on ELMs *Restricted to students in Freshmen Connection.*	Seats (Total: 23) ONLINE ONLINE	 Discussion

WMST255 **Reading Women Writing**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Cross-listed with: ENGL250. Credit only granted for: ENGL250, WMST255 or WGSS255. Formerly: WMST255.

Explores literary and cultural expressions by women and their receptions within a range of historical periods and genres. Topics such as what does a woman need in order to write, what role does gender play in the production, consumption, and interpretation of texts, and to what extent do women comprise a distinct literary subculture. Interpretation of texts will be guided by feminist and gender theory, ways of reading that have emerged as important to literary studies over the last four decades.

0101	Fatima Taha TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE

WMST263 **Introduction to Black Women's Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: WMST263, AASP298I or WGSS263. Formerly: WMST263.

Interdisciplinary exploration of Black women, culture and society in the United States. Drawn primarily from the social sciences and history with complementary material from literature and the arts.

Cross-listed with AASP298I.

0101	Elsa Barkley Brown MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

0102	Elsa Barkley Brown MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) ONLINE ONLINE	 Discussion

WMST269G **Special Topics in Study Abroad II; Topics on Gender Studies**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

WMST269I **Special Topics in Study Abroad II; Social Problems: Women's Issues (In Indian Society)**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

WMST269W **Special Topics in Study Abroad II; Social Problems: Women's Issues Field Study**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

WMST275 **World Literature by Women**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with: CMLT275. Credit only granted for: WMST275, CMLT275 or WGSS275. Formerly: WMST275.

Comparative study of selected works by women writers of several countries, exploring points of intersection and divergence in women's literary representations.

0201	Sara Faradji MW 2:00pm - 3:15pm	Seats (Total: 30) ONLINE
0301	Fatima Taha TuTh 5:00pm - 6:15pm	Seats (Total: 30) ONLINE

WMST298D **Bodies in Contention**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HA, D	General Education: DSHS, DVUP, SCIS

Credit only granted for: WMST298D or WGSS290. Formerly: WMST298D.

Explores the contributions of feminist scholarship in framing and resolving contemporary controversies concerning gendered bodies. It includes the ways in which knowledge about the human body has been shaped by cultural ideas of gender, race, sexuality and ability.

0101	Jessica Mathiason TuTh 11:00am - 12:15pm	Seats (Total: 40) ONLINE

WMST298N **Racialized Gender and Rebel Media**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSSP

Credit only granted for: WMST291 or WMST298N. Formerly: WMST298N.

An introduction to the interdisciplinary field of women's studies and an exploration of the ways in which media has been used as a platform for racial justice, feminist activism, and cultural transformation, with a principal focus on the expressions of women of color. The goals of the course are to explore how different forms of media shape the stories which circulate about race, femininities, masculinities, ethnicities, sexualities, religiosity, power and difference, and to examine how various media formats been used to disrupt dominant stories, to tell new stories, and to create differing understandings of citizenship.

How do different forms of media shape the stories which circulate about race, femininities, masculinities, ethnicities, sexualities, religiosity, power and difference? How have various media formats been used to disrupt dominant stories, to tell new stories, and to create differing understandings of citizenship? This course is an introduction to the interdisciplinary field of women's studies and an exploration of the ways that media has been used as a platform for racial justice, feminist activism, and cultural transformation, with a principal focus on the expressions of women of color.

0101	Eva Hageman MWF 3:00pm - 3:50pm	Seats (Total: 30) ONLINE

WMST300 **Feminist Reconceptualizations of Knowledge**

(Perm req)

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	

Restriction: Permission of ARHU-Women's Studies department; and must be in Women's Studies program.

An examination of how the interdisciplinary study of women and gender has generated new questions, challenged traditional methodologies and offered insights on the ways we come to learn, know, and teach. Explores the impact of feminist thinking on various disciplines.

0101	Jessica Mathiason TuTh 2:00pm - 3:15pm	Seats (Total: 15) ONLINE

WMST314 **Black Women in United States History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Sophomore standing or higher. Cross-listed with: AASP313. Credit only granted for: AASP313, WMST314 or WGSS314. Formerly: WMST314.

Black American women's history from slavery to the present. Focused on gaining a fuller understanding of the effect of race, class and gender on the life cycles and multiple roles of Black women as mothers, daughters, wives, workers and social-change agents.

For Fall 2020: Also offered as HIST329E. Credit granted for AASP313, HIST329E, or WMST314.

0101	Elsa Barkley Brown TuTh 3:30pm - 4:45pm	Seats (Total: 40) ONLINE

WMST319C **Workshops in Gender, Race, and Queer Studies; Gender, Drag, and Burlesque**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics will change each semester but all workshops will be designed to have students think transdisciplinarily and interdisciplinarily about a specific topic or issue and to understand how differing approaches shape knowledge. Assignments within the workshops are aimed at students developing their skills in forms of presentation beyond the written essay, e.g. oral argument, digital or creative projects. Collaborative work must be central to all workshop courses; these collaborative activities do not preclude the possibility of individual research/writing assignments but the Workshops should emphasize conversation, debate, collaboration, and critique more so than the individually authored essay.

0101	Sydney Lewis TuTh 12:30pm - 1:45pm	Seats (Total: 30) ONLINE

WMST319D **Workshops in Gender, Race, and Queer Studies; Disability Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics will change each semester but all workshops will be designed to have students think transdisciplinarily and interdisciplinarily about a specific topic or issue and to understand how differing approaches shape knowledge. Assignments within the workshops are aimed at students developing their skills in forms of presentation beyond the written essay, e.g. oral argument, digital or creative projects. Collaborative work must be central to all workshop courses; these collaborative activities do not preclude the possibility of individual research/writing assignments but the Workshops should emphasize conversation, debate, collaboration, and critique more so than the individually authored essay.

0101	Jessica Mathiason	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	ONLINE

WMST325 **The Sociology of Gender**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Prerequisite: 3 credits in SOCY courses. Cross-listed with: SOCY325. Credit only granted for: SOCY325, WMST325 or WGSS325. Formerly: WMST325.

Institutional bases of gender roles and gender inequality, cultural perspectives on gender, gender socialization, feminism, and gender-role change. Emphasis on contemporary American society.

0101	Liana Sayer	Seats (Total: 60)
	MW 11:00am - 11:50am	ONLINE
	Class time/details on ELMs	ONLINE

WMST336 **Psychology of Women**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHS

Prerequisite: PSYC100. Cross-listed with: PSYC336. Credit only granted for: PSYC336, WMST336 or WGSS 336. Formerly: WMST336.

A study of the biology, life span development, socialization, personality, mental health, and special issues of women.

Restricted to undergraduate PSYC students or WMST students only.

0101	Monica Kearney	Seats (Total: 110)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

WMST350 **Feminist Pedagogy**

(Perm req)

Credits: 6

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-Women's Studies department.

General application of feminist methodology to teaching and communication skills, teaching strategies, motivation, classroom dynamics and knowledge of students' development and learning styles.

Contact department for information to register for this course.

WMST358 **Undergraduate Teaching Assistantship**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail

Students work under the supervision of a faculty mentor to assist with an undergraduate LGBT or WGSS course while also becoming conversant in feminist, critical race, and queer pedagogical debates and approaches.

Restriction: Permission of ARHU-Women's Studies department. Repeatable to 9 credits. Students work under the supervision of a faculty mentor to assist with an undergraduate LGBT or WMST course while also becoming conversant in feminist, critical race, and queer pedagogical debates and approaches.

Contact department for information to register for this course.

WMST368 **Undergraduate WMST Internship**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Undergraduate Internship in a position related to women, gender, and sexuality studies and overseen by a member of the WGSS faculty.

Restriction: Permission of ARHU-Women's Studies department; and must have Learning Proposal approved by Women's Studies Academic Advisor; and junior standing or higher. Repeatable to 9 credits if content differs. Formerly: WMST386. Undergraduate Internship in a position related to Women's Studies and overseen by a member of the WMST faculty.

0101	Elsa Barkley Brown Contact instructor or department for details.	Seats (Total: 3)
0601	Alexis Lothian Contact instructor or department for details.	Seats (Total: 3)
0901	Michelle Rowley Contact instructor or department for details.	Seats (Total: 3)
1101	Ashwini Tambe Contact instructor or department for details.	Seats (Total: 3)

1201	Ruth Zambrana Contact instructor or department for details.	Seats (Total: 3)
1701	Sydney Lewis Contact instructor or department for details.	Seats (Total: 3)
1801	Jessica Mathiason Contact instructor or department for details.	Seats (Total: 3)

WMST369G **Special Topics in Study Abroad III; Gender and Post Socialist Transformation in Central Europe**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

WMST378 **Undergraduate Research and Creative Works Assistantship**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

The Undergraduate Research Assistant provides an opportunity to develop a deep understanding of specific research methods and topics while involving the student in a professional role that requires ethical responsibility. The precise syllabus for the URA will be personalized to the student's interests and abilities, as well as to the specific research project and the Faculty Mentor's expectations. The student will meet with the Faculty Mentor prior to enrolling for a URA in order to determine the responsibilities and learning goals for the semester.

Contact department for information to register for this course.

WMST379A **Topics in Women, Gender, and Sexuality Studies; Honors Thesis Writing I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Thematic exploration of a topic in women, gender, and sexuality studies.

By Permission Only.

Contact department for information to register for this course.

WMST379B **Topics in Women, Gender, and Sexuality Studies; Honors Thesis Writing II**

(Perm req)

Credits: 3 Grading Method: Regular

Thematic exploration of a topic in women, gender, and sexuality studies.

Contact department for information to register for this course.

WMST386 **Undergraduate WMST Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-Women's Studies department; and must have Learning Proposal approved by Women's Studies Academic Advisor; and junior standing or higher. Repeatable to 9 credits if content differs. Formerly: WMST386.

Undergraduate Internship in a position related to Women's Studies and overseen by a member of the WMST faculty.

Contact department for information to register for this course.

WMST400 **Theories of Feminism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course in WMST; or must have completed a course cross-listed with a WMST course.

A study of the multiplicity of feminist theories which have been developed to explain women's position in the family, the workplace, and society. Major feminist writings are considered in the context of their historical moment and in the context of the intellectual traditions to which they relate.

0101	Sydney Lewis	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ONLINE

WMST468L **Feminist Cultural Studies; Lenin to Pussy Riot**

Credits: 3 Grading Method: Regular

Each version of this course focuses on one or several forms of popular culture -- such as TV, music, film, cyber-culture, or genre fiction (for example, science fiction) -- and demonstrates how feminists value, critique and explain such forms. Tools of feminist cultural studies include economic and social analyses of power, race, sexuality, gender, class, nationality, religion, technology, and globalization processes.

0101	Catherine Schuler	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

WMST488C **Senior Seminar; South Asian Feminisms, Histories and Possibilities**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Seminar for advanced majors in women's studies or other students with appropriate preparation. Interdisciplinary topics will vary each semester.

0101	Ashwini Tambe	Seats (Total: 15)
	F 11:00am - 1:30pm	ONLINE

WMST498A **Advanced Special Topics in Women, Gender, and Sexuality Studies; Community Interventions: Domestic Violence**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of a thematic topic in women, gender, and sexuality studies.

0101	Karen O'Brien	Seats (Total: 35)
	MW 8:30am - 9:45am	ONLINE

WMST498L **Advanced Special Topics in Women, Gender, and Sexuality Studies; Women in Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of a thematic topic in women, gender, and sexuality studies.

Contact department for information to register for this course.

WMST498V **Advanced Special Topics in Women, Gender, and Sexuality Studies; Women and Memory in Material and Digital Worlds**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of a thematic topic in women, gender, and sexuality studies.

Repeatable to 9 credits if contents differs. Jointly offered with ENGL37 8Z. Credit only granted for ENGL378Z or WMST498V.

0101	Jessica Enoch	Seats (Total: 25)
	MW 2:00pm - 3:15pm	ONLINE

WMST498W **Sex, Gender, and Jewish Identity**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU, DVUP

Prerequisite: 1 course in WMST; or 1 course in JWST; or 1 course in LGBT; or permission of instructor. Cross-listed with: JWST492, LGBT448W. Credit only granted for: JWST492, JWST409G, JWST419W, LGBT448W, or WMST498W. Formerly: JWST409G and JWST419W.

An exploration of Jewish embodiment, including dynamics related to biological sex, culturally-framed gender, and sexuality. Topics of discussion may include transgender and intersex Jews, stereotypes and gender performance, modesty, genetics, and body alteration. Focus is on contemporary Jewish culture, framed within the larger historical and textual tradition.

Also offered as LGBT448W and JWST492. Credit granted only for WMST498W, LGBT448W or JWST492.

0101	Maxine Grossman	Seats (Total: 25)
	Th 4:00pm - 6:30pm	ONLINE

WMST498Y **Advanced Special Topics in Women, Gender, and Sexuality Studies; Dickinson, Erotics, Poetics, Biopics: Some (Queer) Ways We Read Poetry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of a thematic topic in women, gender, and sexuality studies.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Cross-listed with ENGL439D and LGBT448Y. Credit only granted for ENGL439D, LGBT448Y, or WMST498Y.

0101	Martha Nell Smith	Seats (Total: 22)
	TuTh 2:00pm - 3:15pm	ONLINE

WMST499 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Research and writing or specific readings on a topic selected by the student and supervised by a faculty member of the Women's Studies Department.

Contact department for information to register for this course.

WMST601 **Approaches to Women's Studies I**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: WMST400; or students who have taken courses with comparable content may contact the department.

Examines two fundamental concepts in women's studies: intersectionality and interdisciplinarity. Looks at how feminisms have shaped and been shaped by knowledge-production within and across disciplinary boundaries, cultures, and paradigms. Develops an appreciation of intersectional theory as a critical research tool and as a set of responses to issues of power, domination, oppression and other loci of difference.

0101	Alexis Lothian W 6:00pm - 8:30pm	Seats (Total: 12) ONLINE

WMST618 **Feminist Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular

Examines the higher education classroom from a feminist perspective through theory and analysis. Students are graduate teaching assistants with the Women's Studies department.

Prerequisite: permission of department. For WMST major onlys.

0101	Elsa Barkley Brown Class time/details on ELMs	Seats (Total: 4) ONLINE

WMST619 **Women's Studies Teaching Practicum**

(Perm req)

Credits: 1 Grading Method: Regular

Provides Women's Studies graduate teaching assistants with ongoing regular faculty supervision during the semesters the students are teaching WMST courses.

Prerequisite: permission of department. For WMST majors only.

0101	Alexis Lothian Class time/details on ELMs	Seats (Total: 10) ONLINE

WMST628 **Women's Studies Colloquium**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

An intensive advanced exploration of current problems and issues in women's studies.

0101	Alexis Lothian Class time/details on ELMs	Seats (Total: 18) ONLINE

WMST699 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Research and writing on specific readings on a topic selected by the student which is approved and supervised by a faculty member of the Women's Studies Department.

Contact department for information to register for this course.

WMST709 **Directed Independent Reading for Major Field Exam**

(Perm req)

Credits: 1-4 Grading Method: Sat-Fail

Directed reading in preparation for Major Field Exam. In consultation with their advisors, students identify, analyze, critique and synthesize material relevant to their major fields of inquiry. Grading will be based on combinations of oral performance in the bi-weekly meetings, production of annotated bibliographies and synthetic papers.

Contact department for information to register for this course.

WMST799 **Masters Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

WMST898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

WMST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.